

STORAGE AREA NETWORK METHODS AND APPARATUS WITH
VIRTUAL SCAN RECOGNITION
A.R. Heitman et al.
SJO920010096US1

1/46

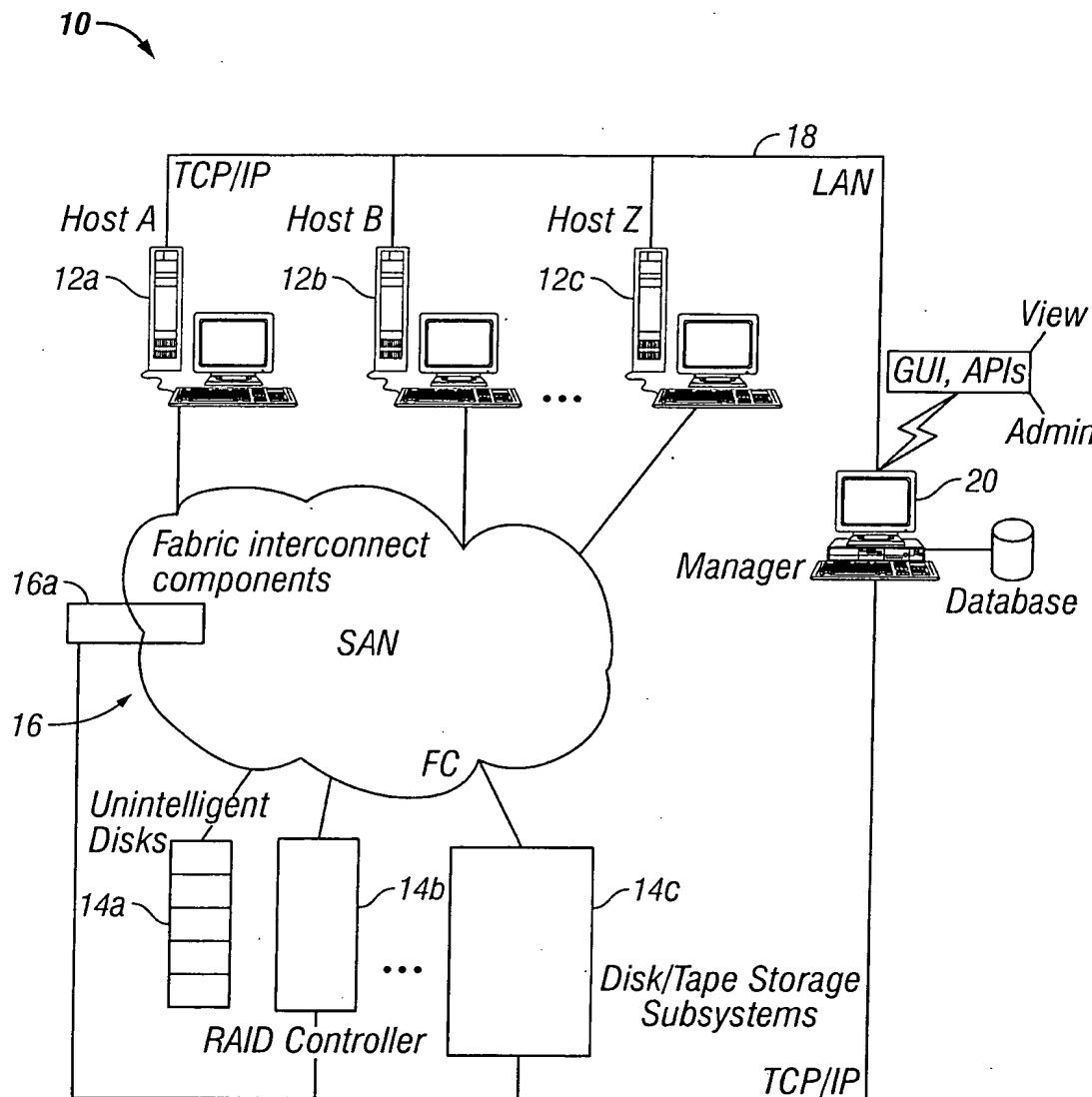


FIG. 1

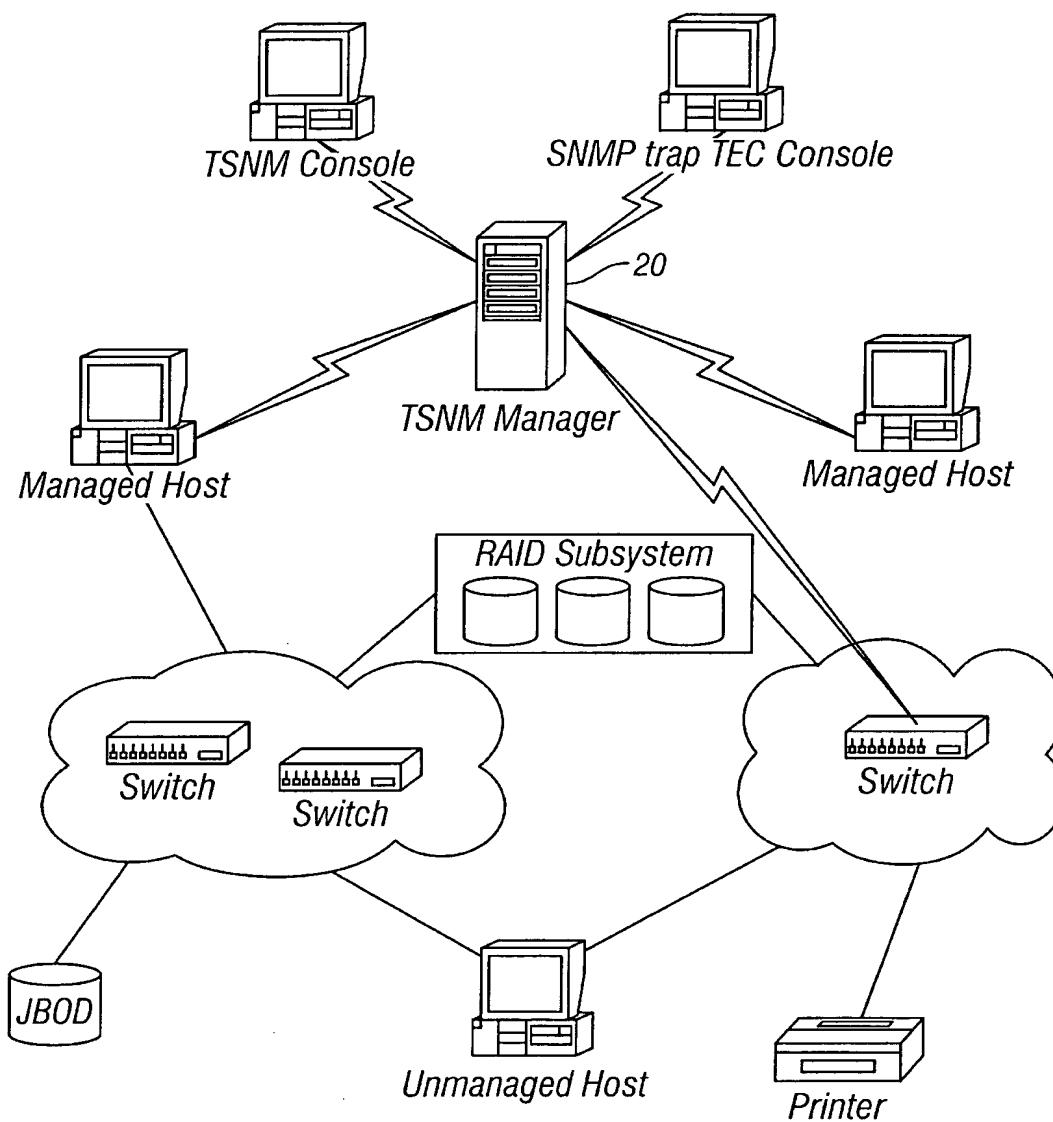


FIG. 2

3/46

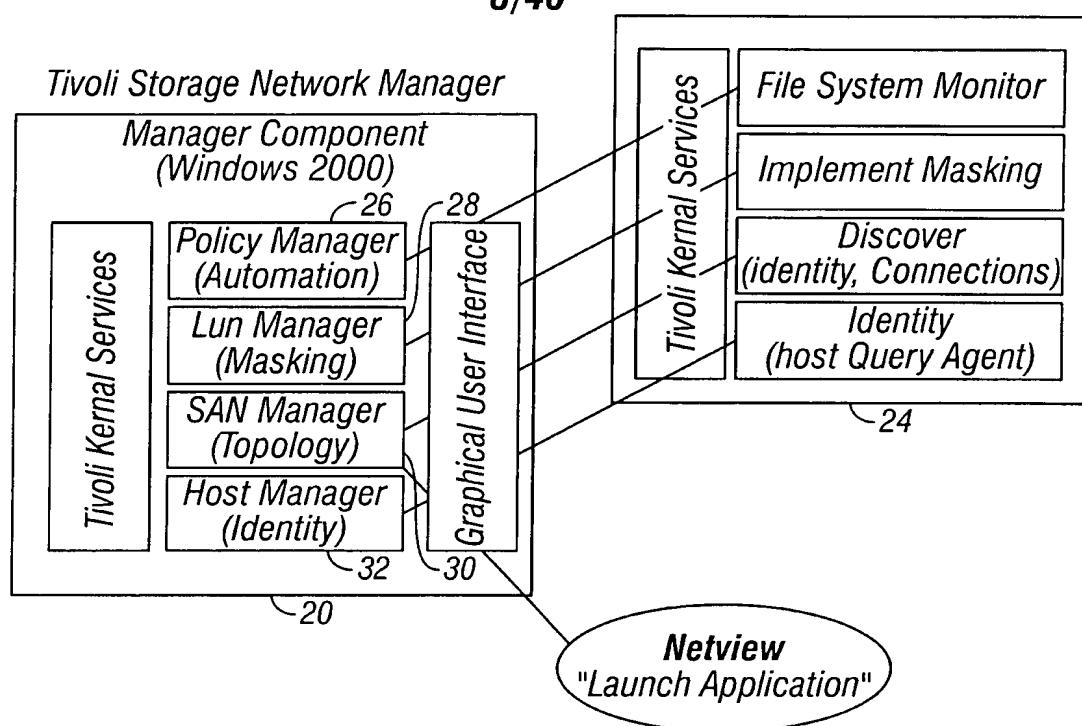


FIG. 3

Manager & Agent Communication

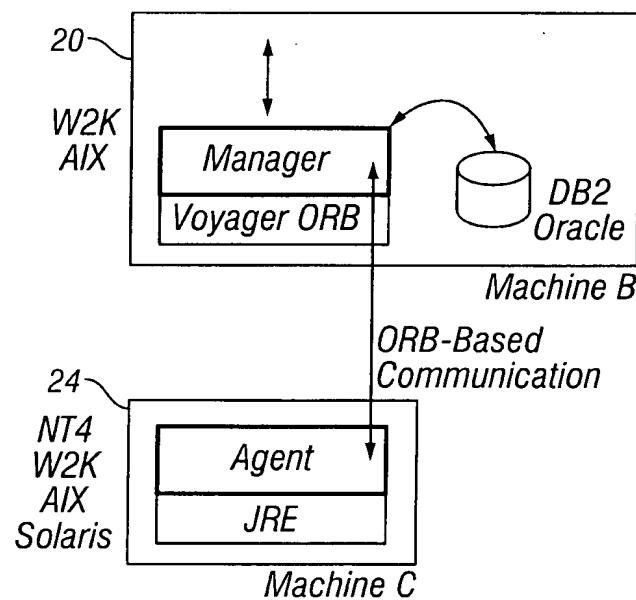


FIG. 4

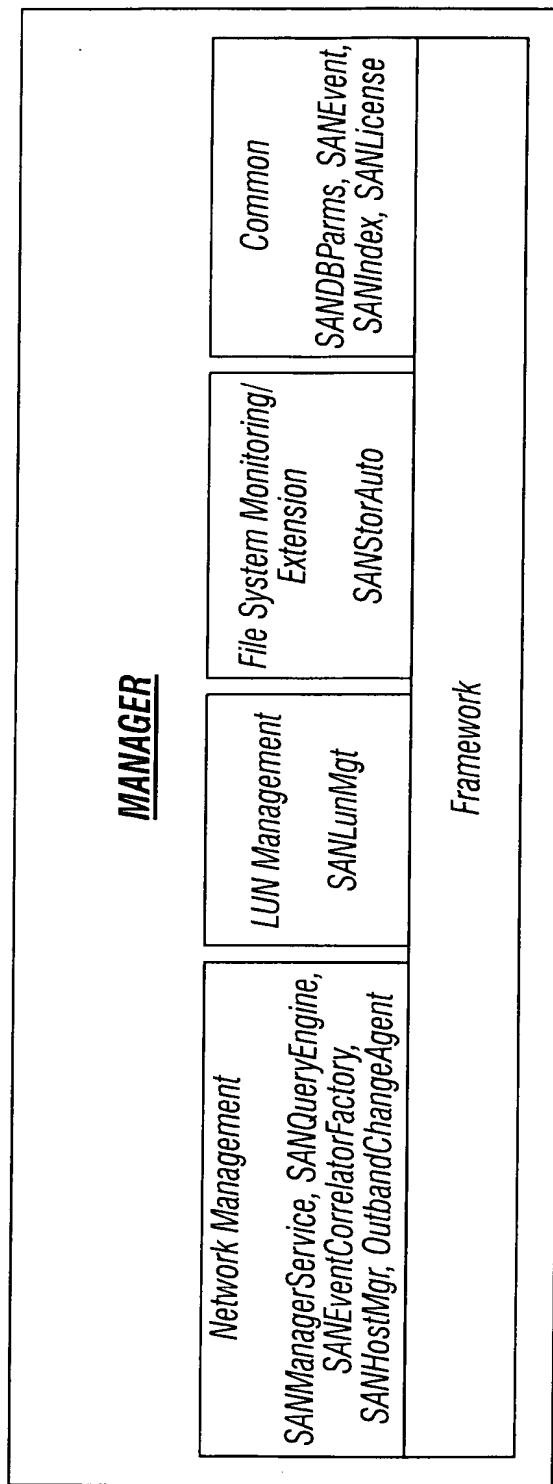


FIG. 5

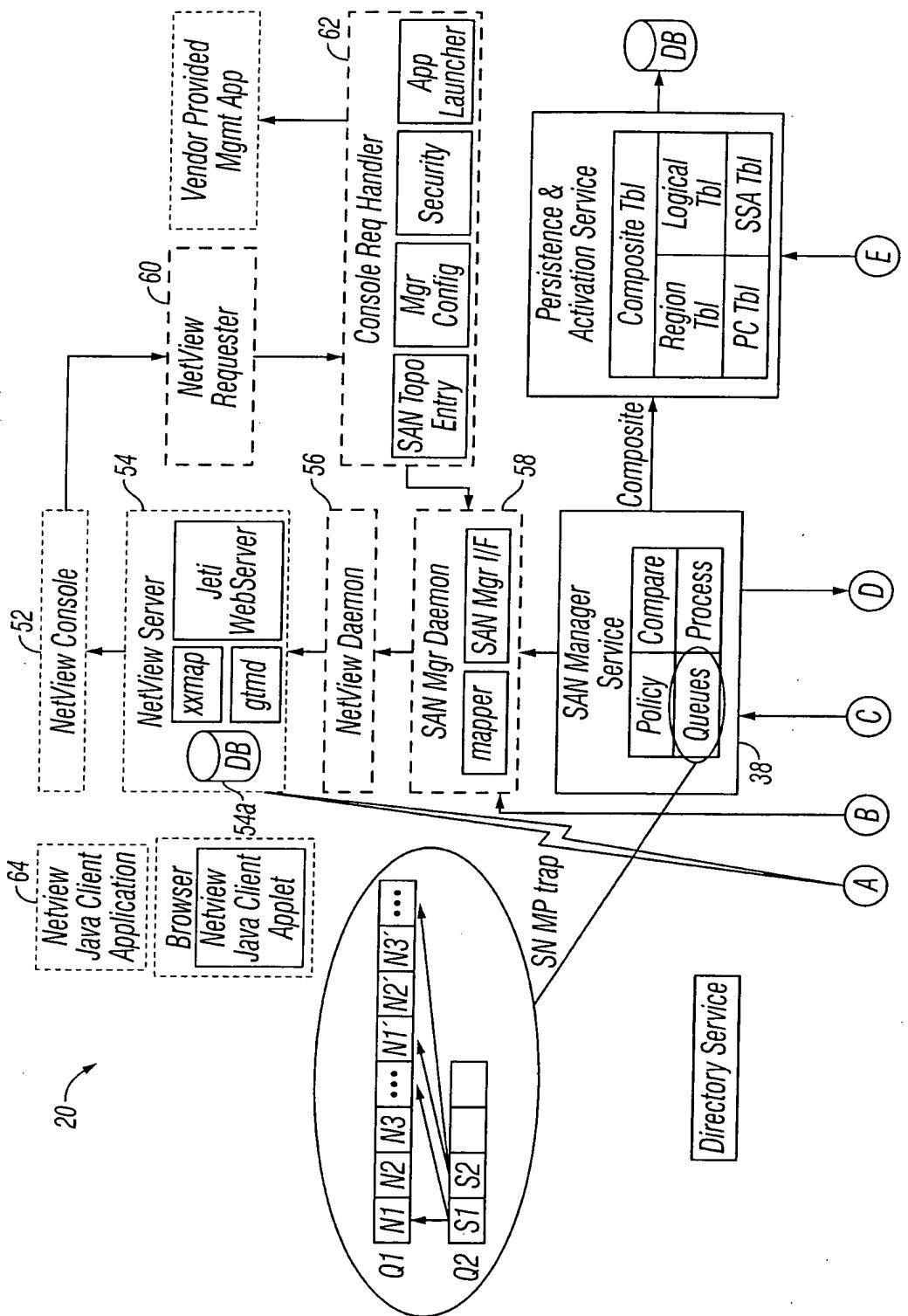


FIG. 6A

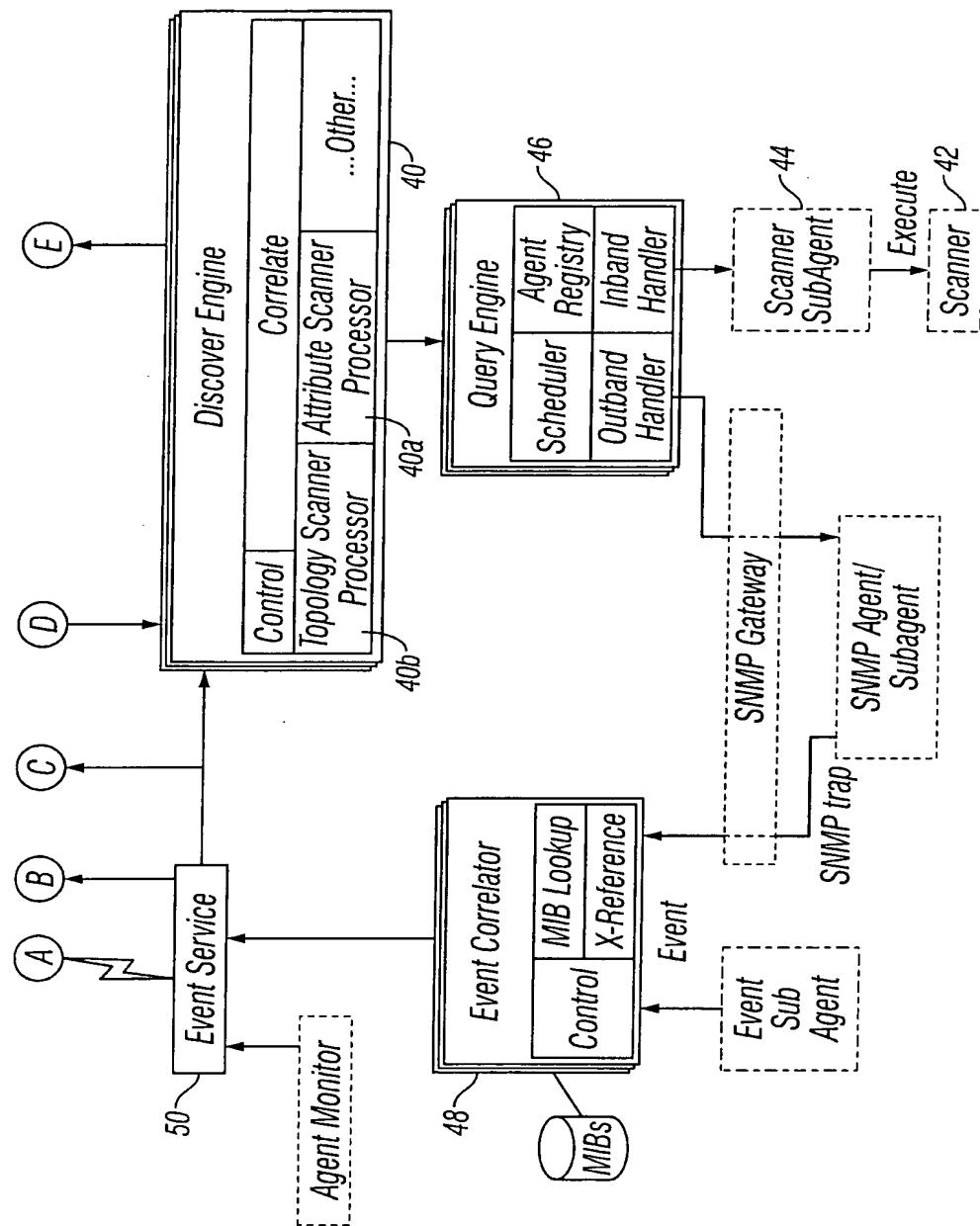


FIG. 6B

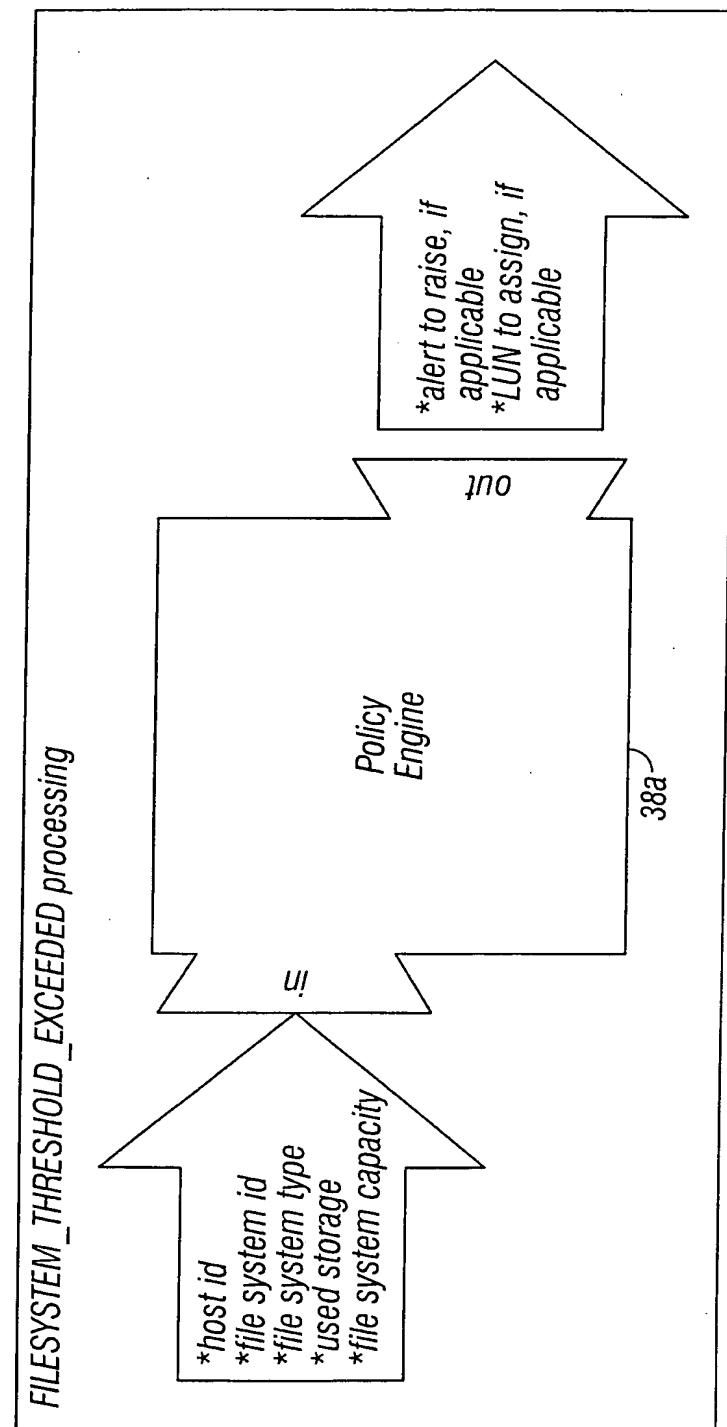


FIG. 7A

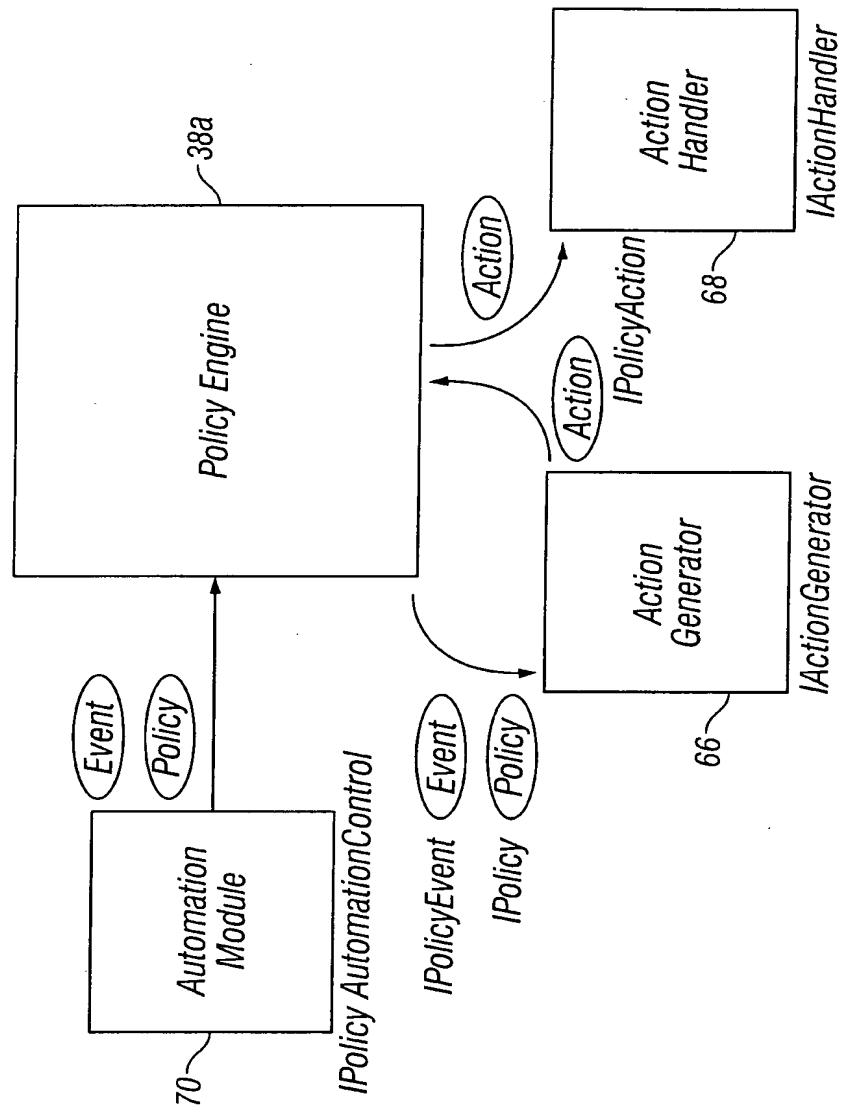


FIG. 7B

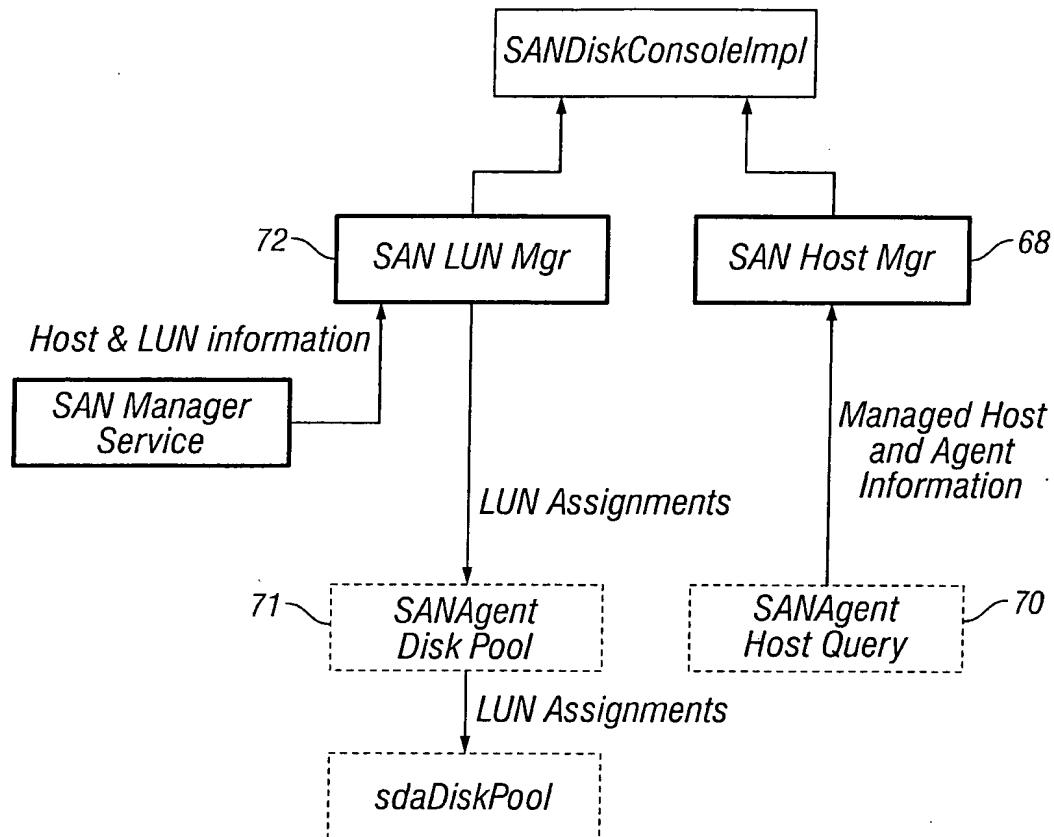


FIG. 8

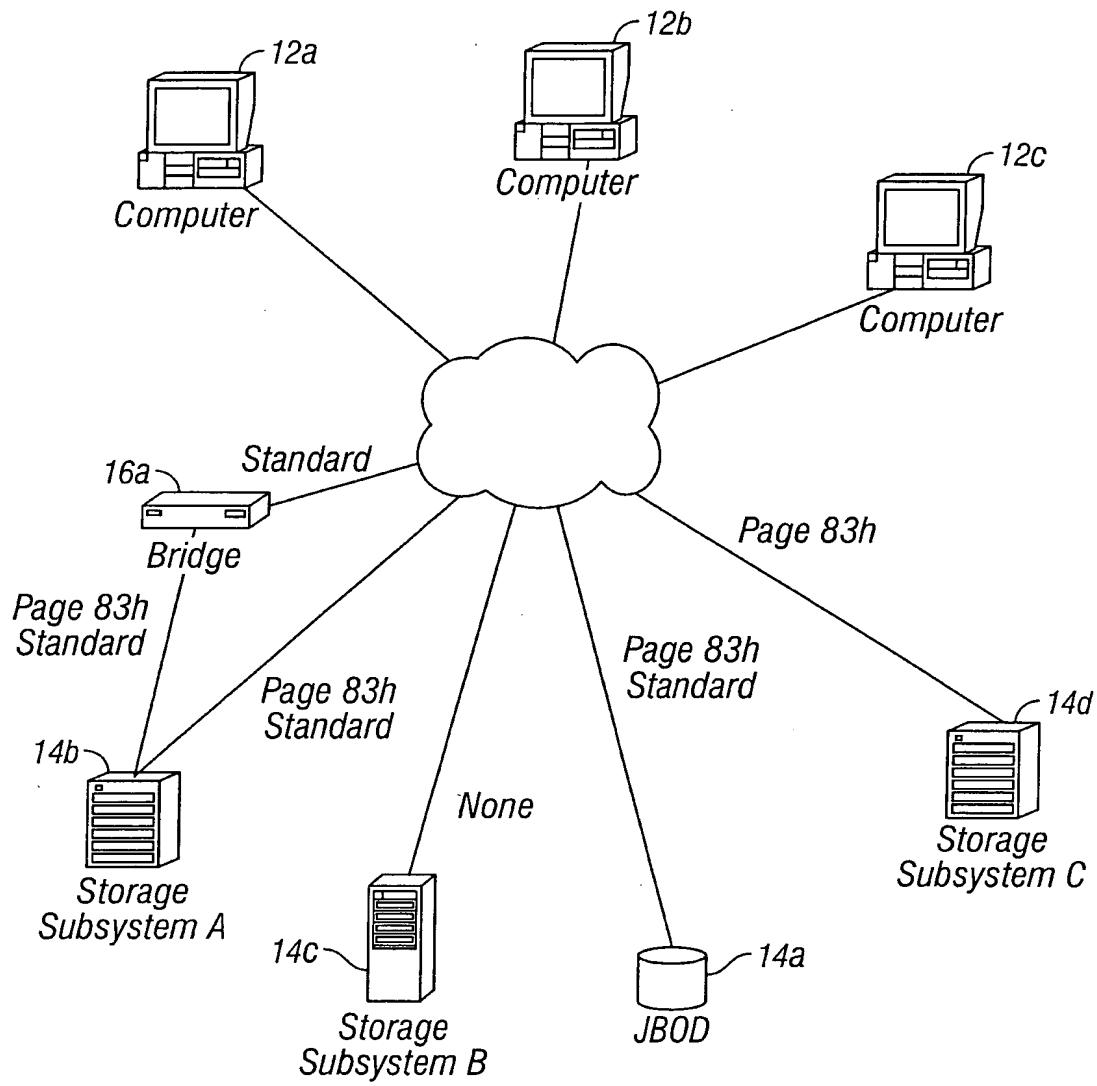


FIG. 9

11/46

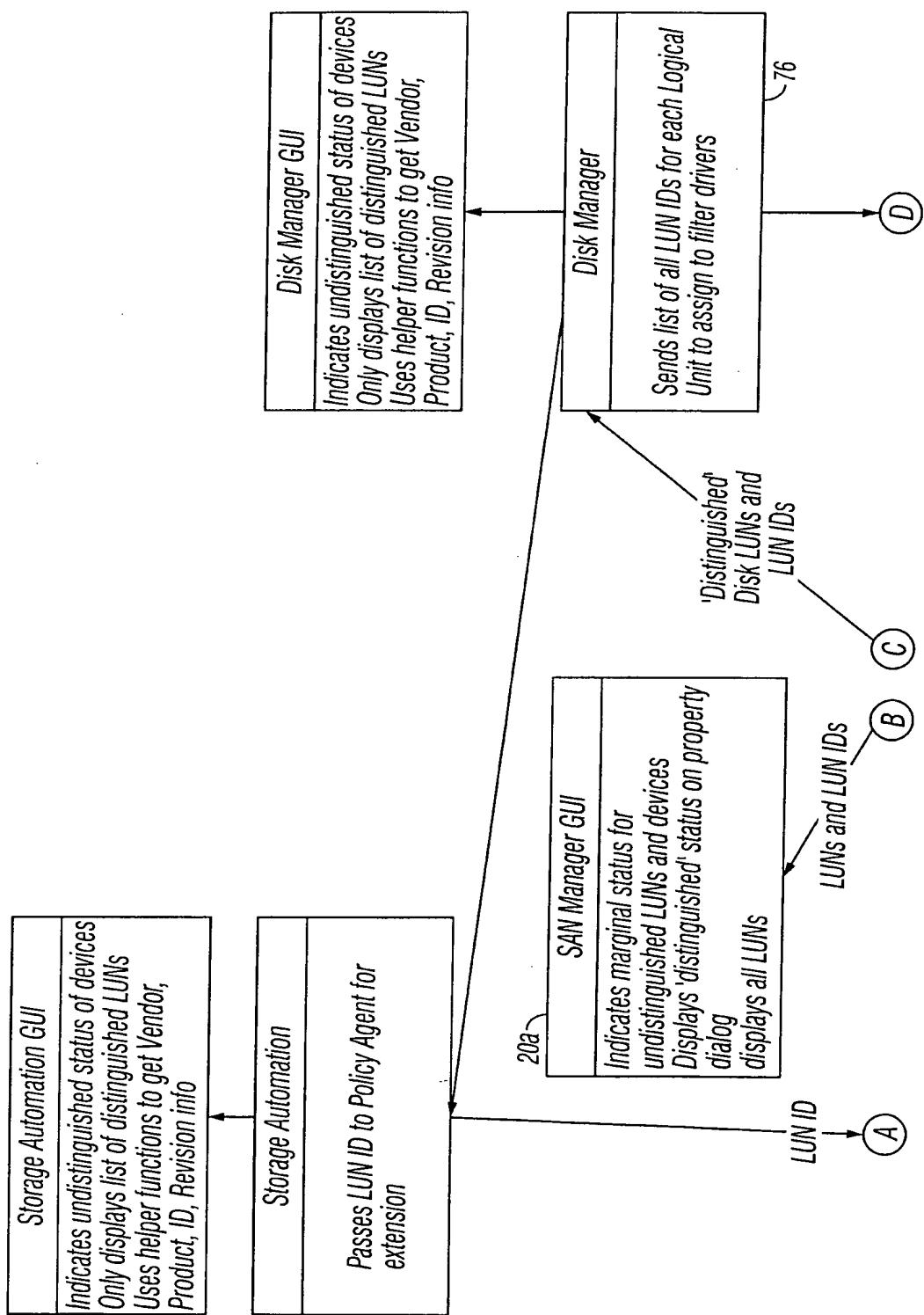


FIG. 10A

12/46

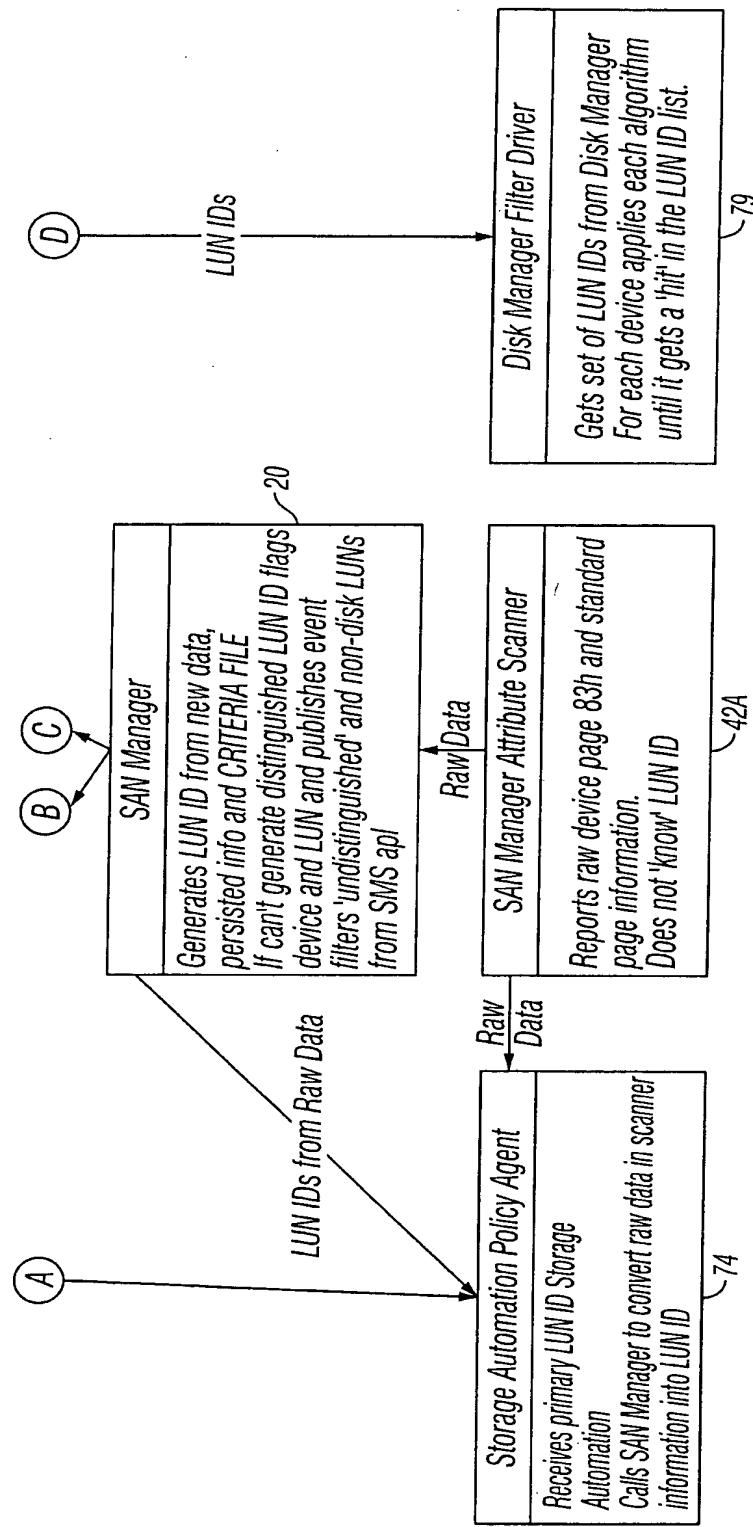


FIG. 10B

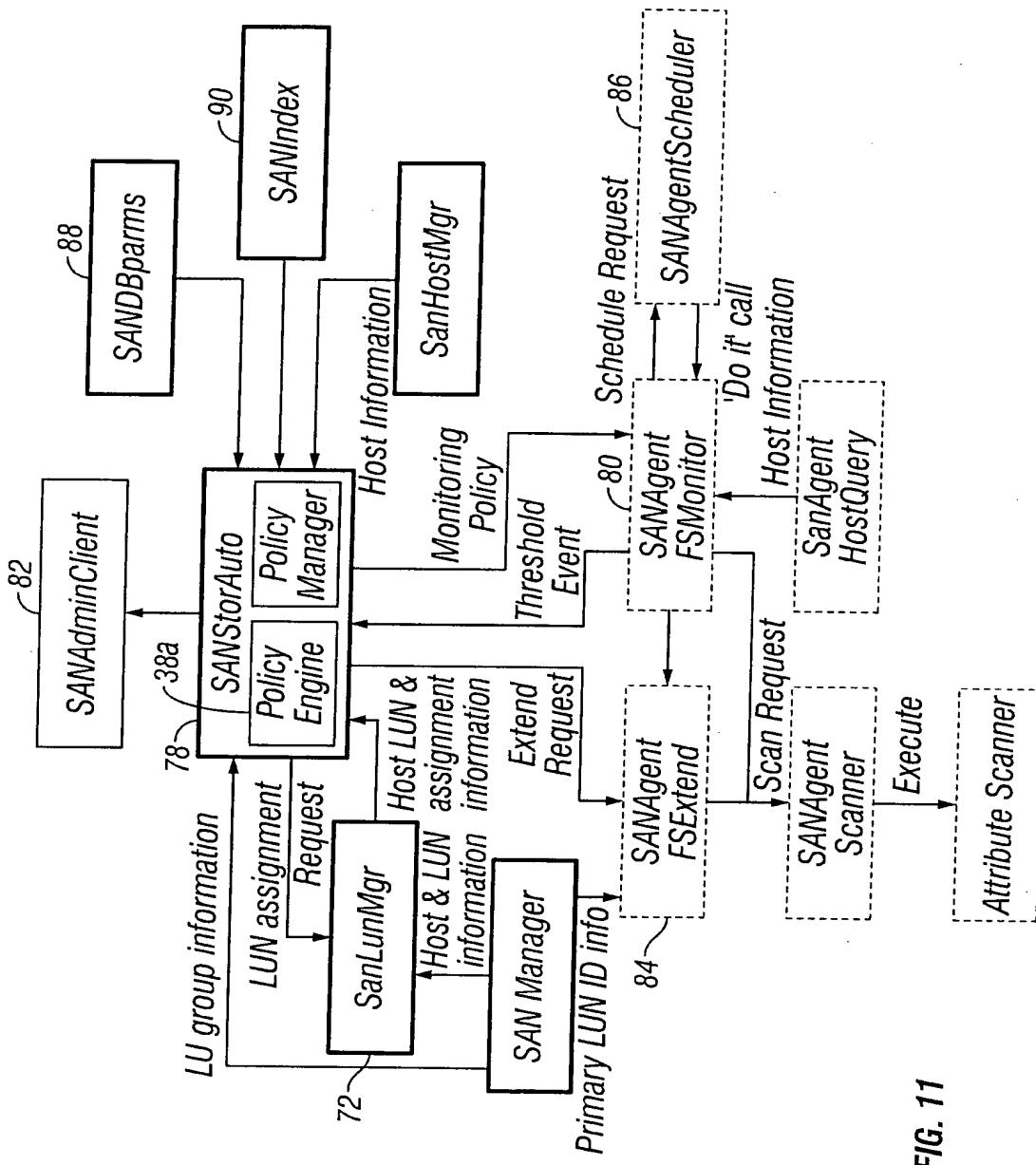


FIG. 11

14/46

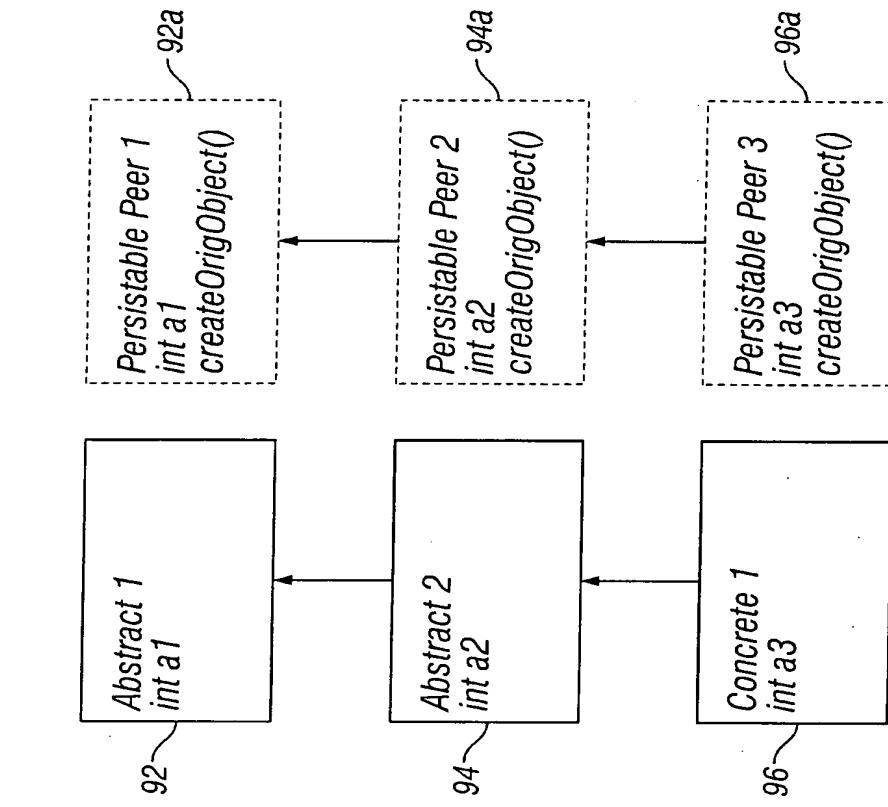


FIG. 12

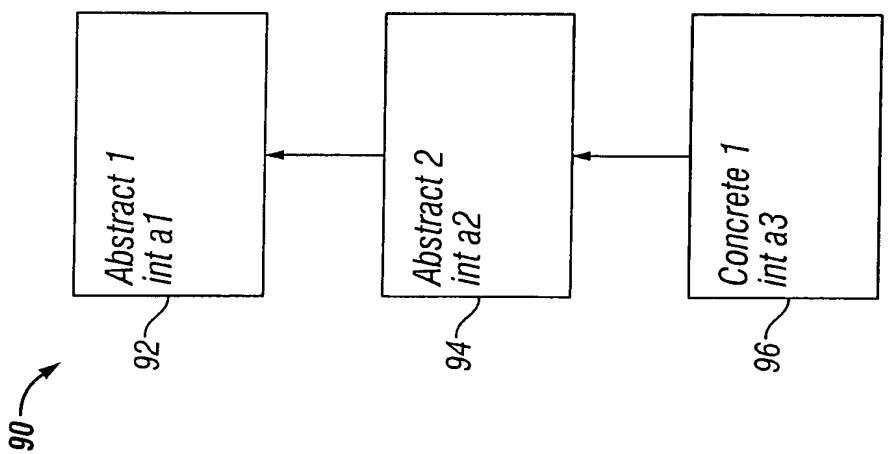


FIG. 13

15/46

FIG. 14A

FIG. 14B

FIG. 14C

FIG. 14D

FIG. 14

16/46

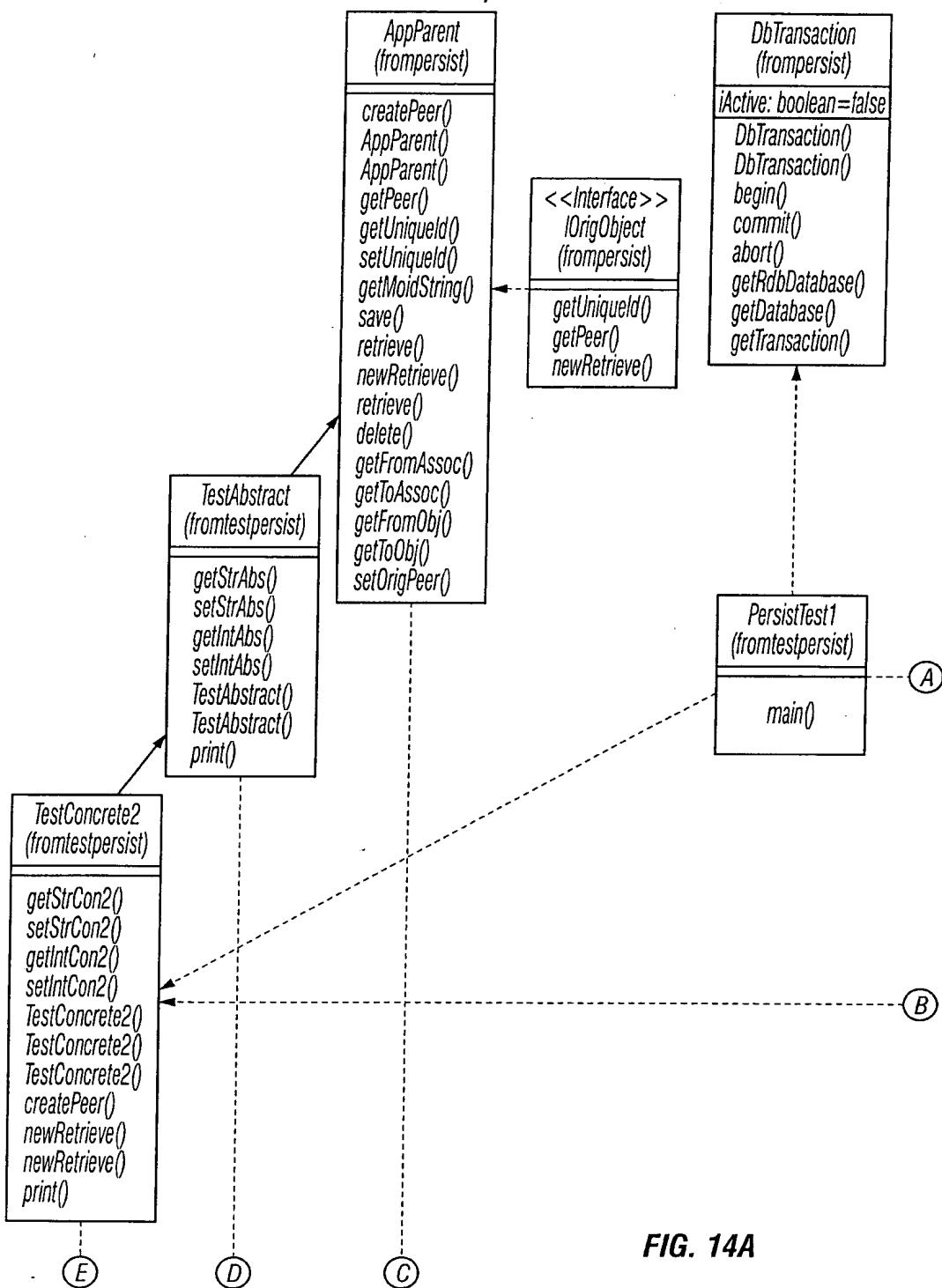


FIG. 14A

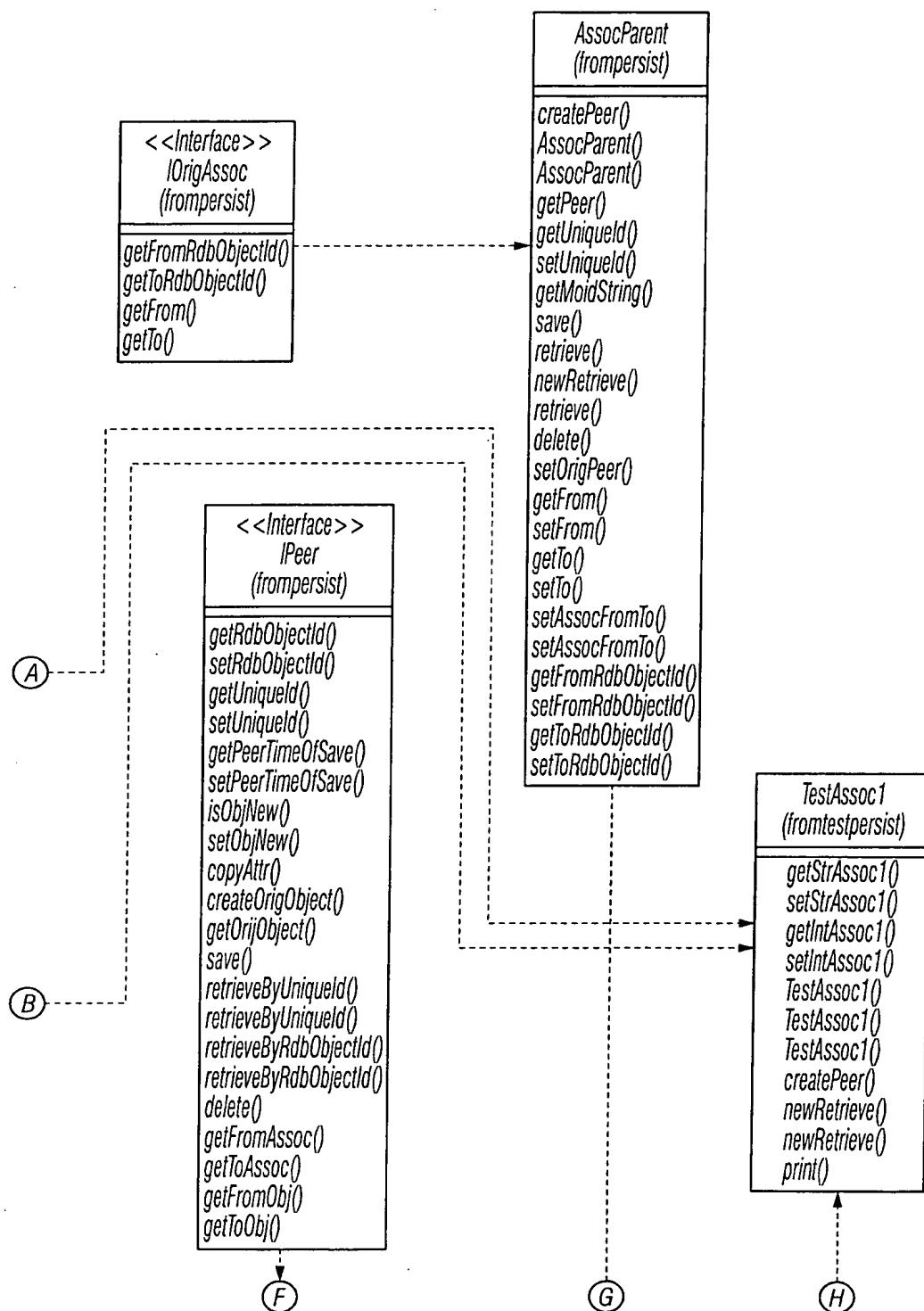


FIG. 14B

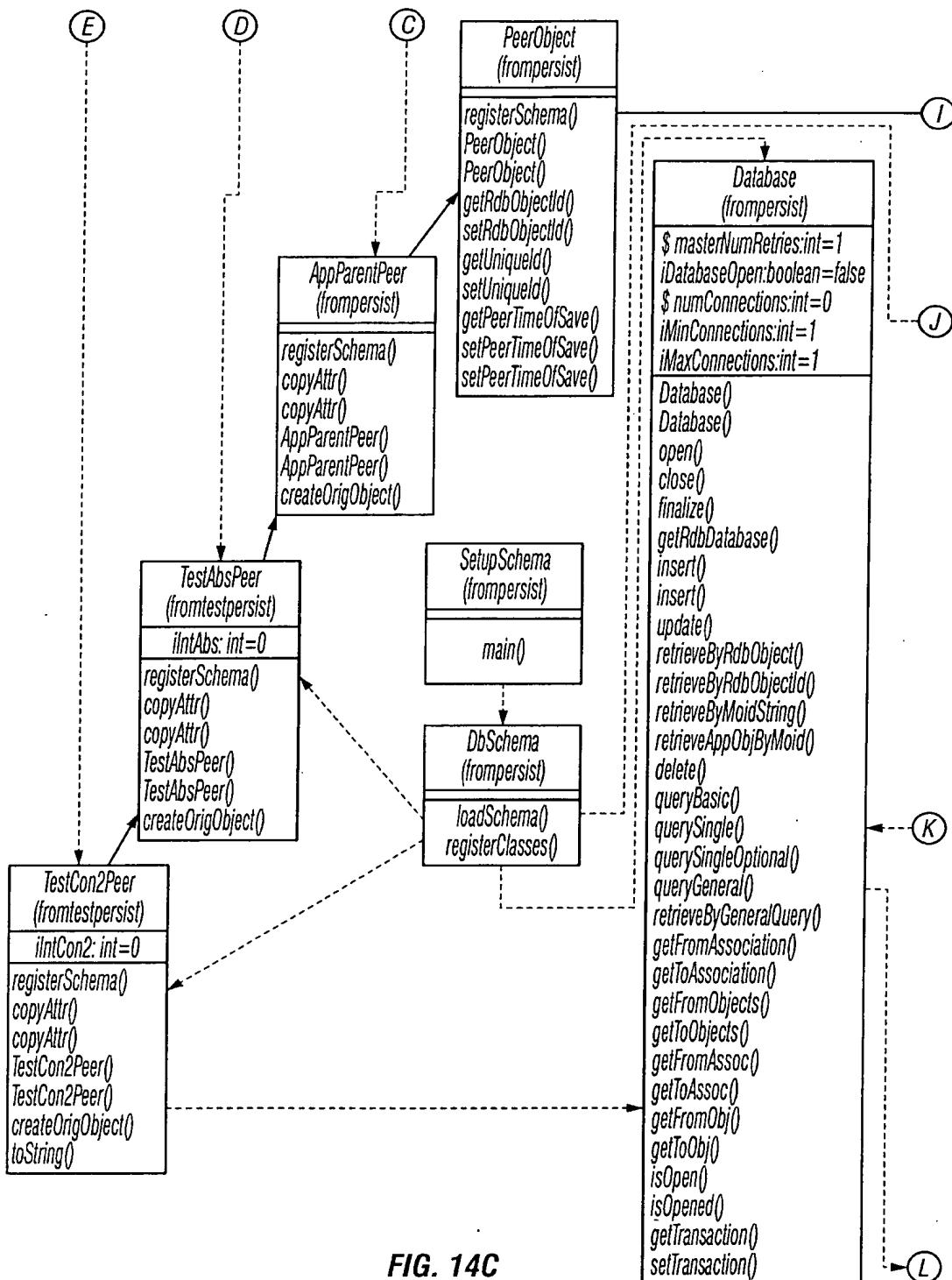


FIG. 14C

19/46

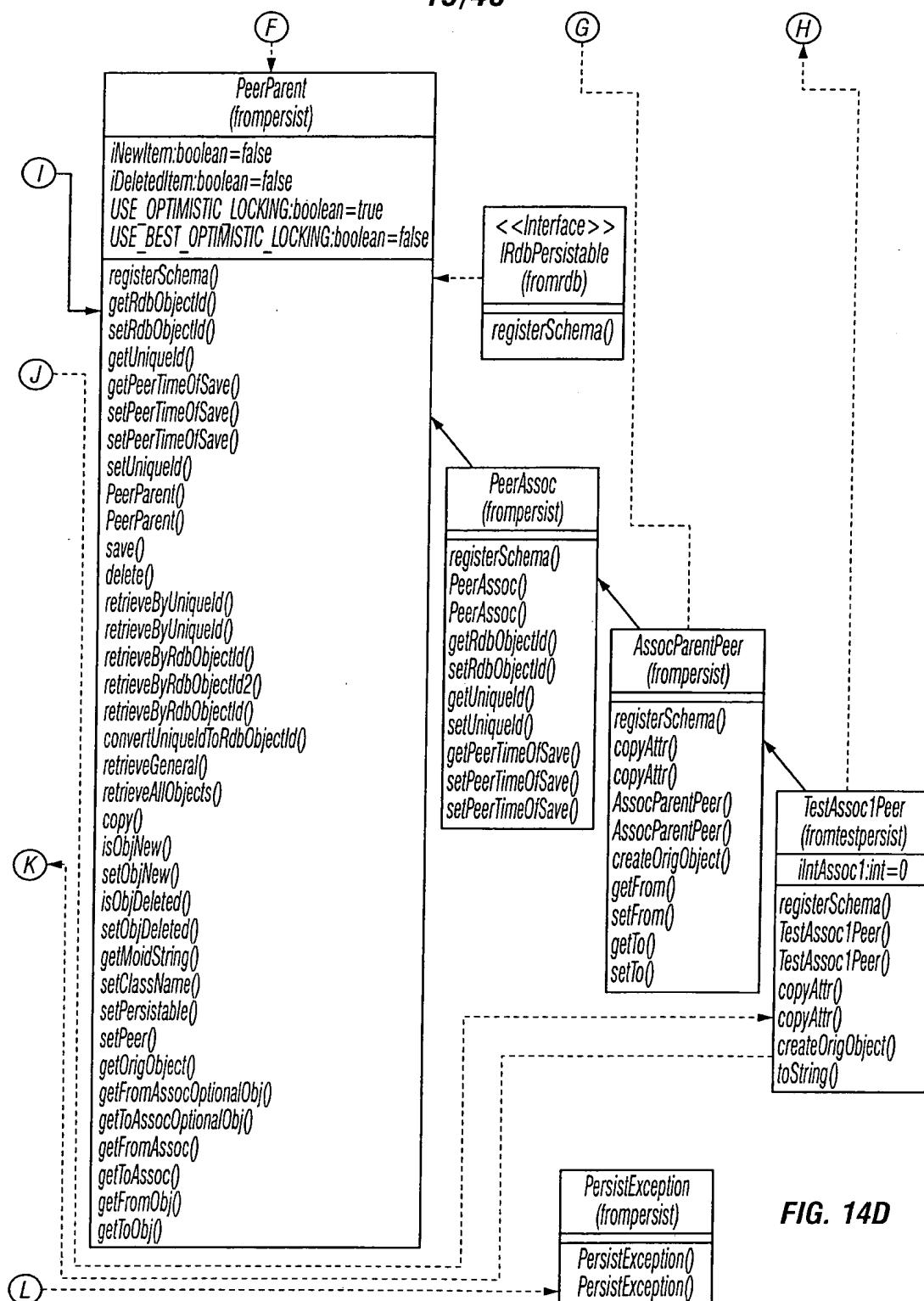
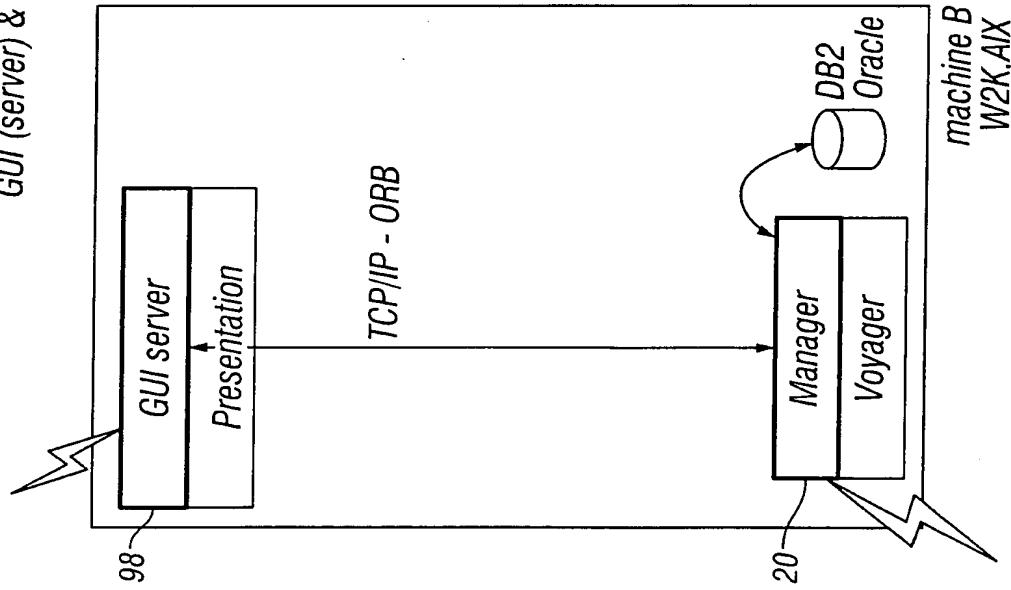


FIG. 14D

GUI (server) & Manager communication



- ▲ Manager creates objects (services) and "bind" them to Voyager directory service
- ▲ GUI "looks up" the object by name in directory service and get the object "proxy"
- ▲ GUI invokes object methods to obtain info or perform operation

Example: Class TDMServer()
 LUN[] getAccessibleLunsByHost(HostaHost)
 LUN[] getAccessibleLunsByHost(java.lang.String ip)
 LUN[] getAllAccessibleLuns()
 LUN[] getAssignedLunsByHost(HostaHost)
 LUN[] getAssignedLunsByHost(java.lang.String ip)

//Look up the ITdm Server proxy object from the directory service
 ITdmServeraTdm = (ITdm Server) Namespace.lookup(
 "//localhost:9000/sandir/TdmServer");
 //Get a list of all LUN objects in the region.
 LUN[] temp1 = aTdm.getAllAccessibleLuns();

FIG. 15

21/46

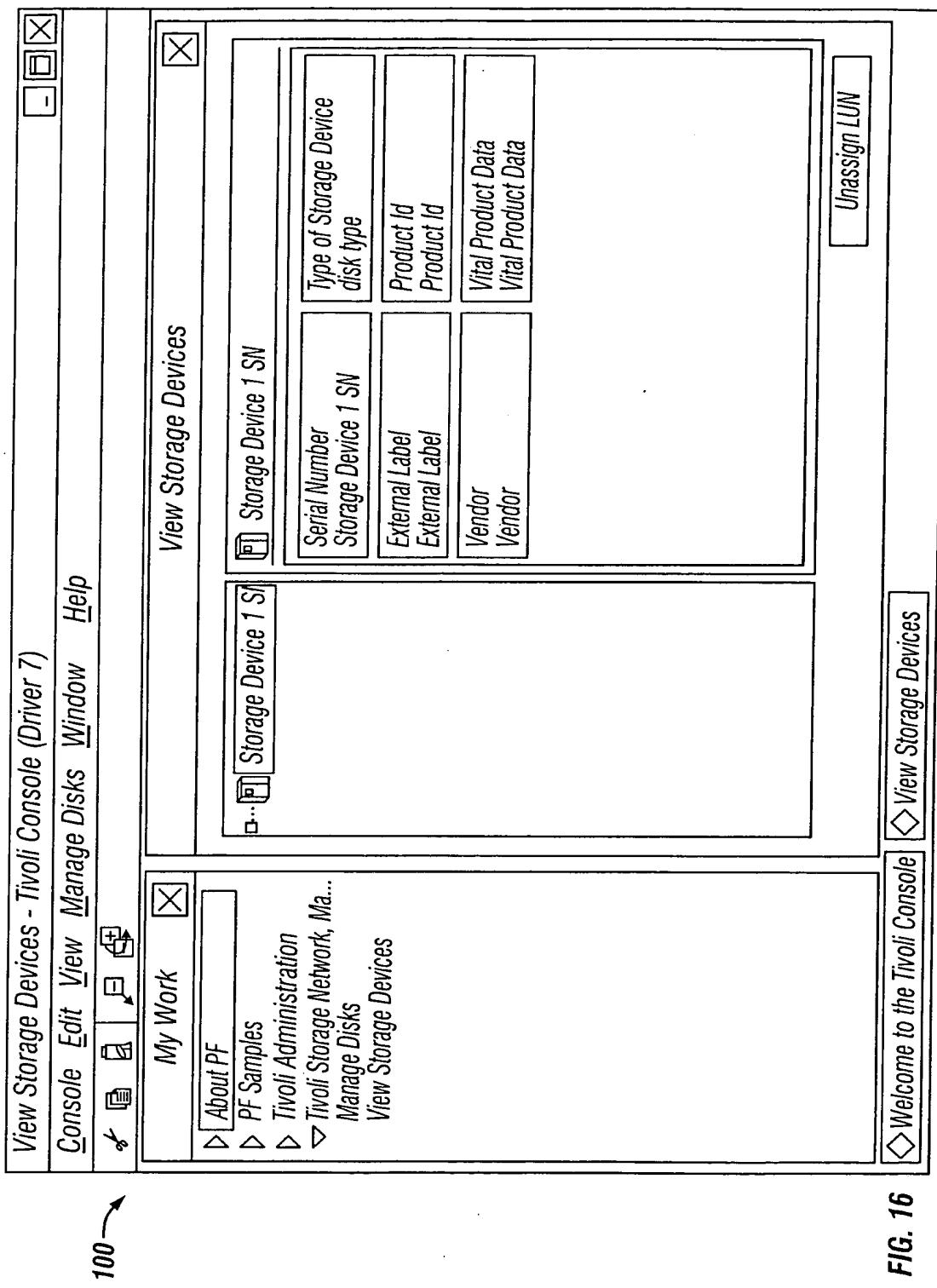


FIG. 16

22/46

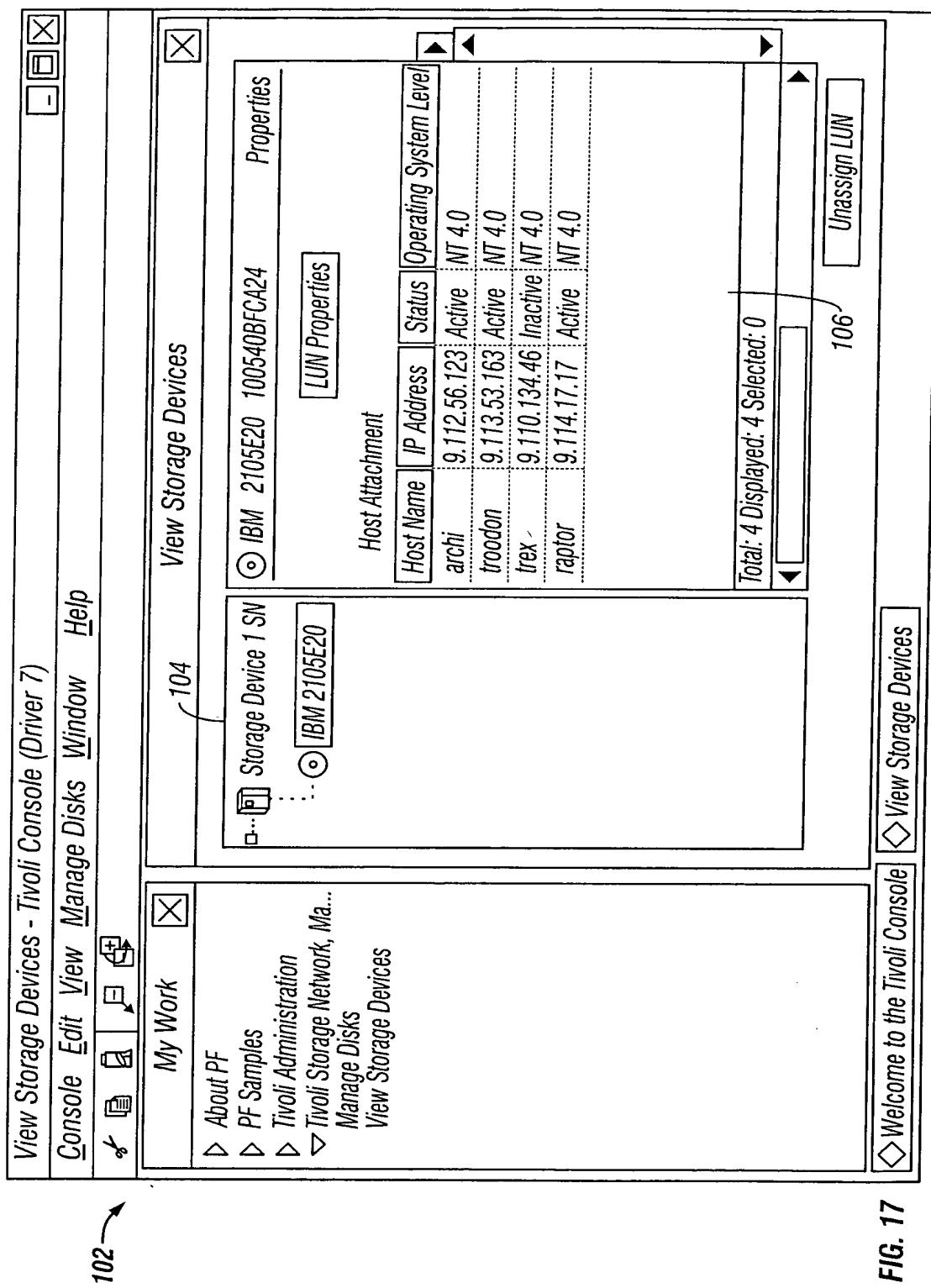


FIG. 17

23/46

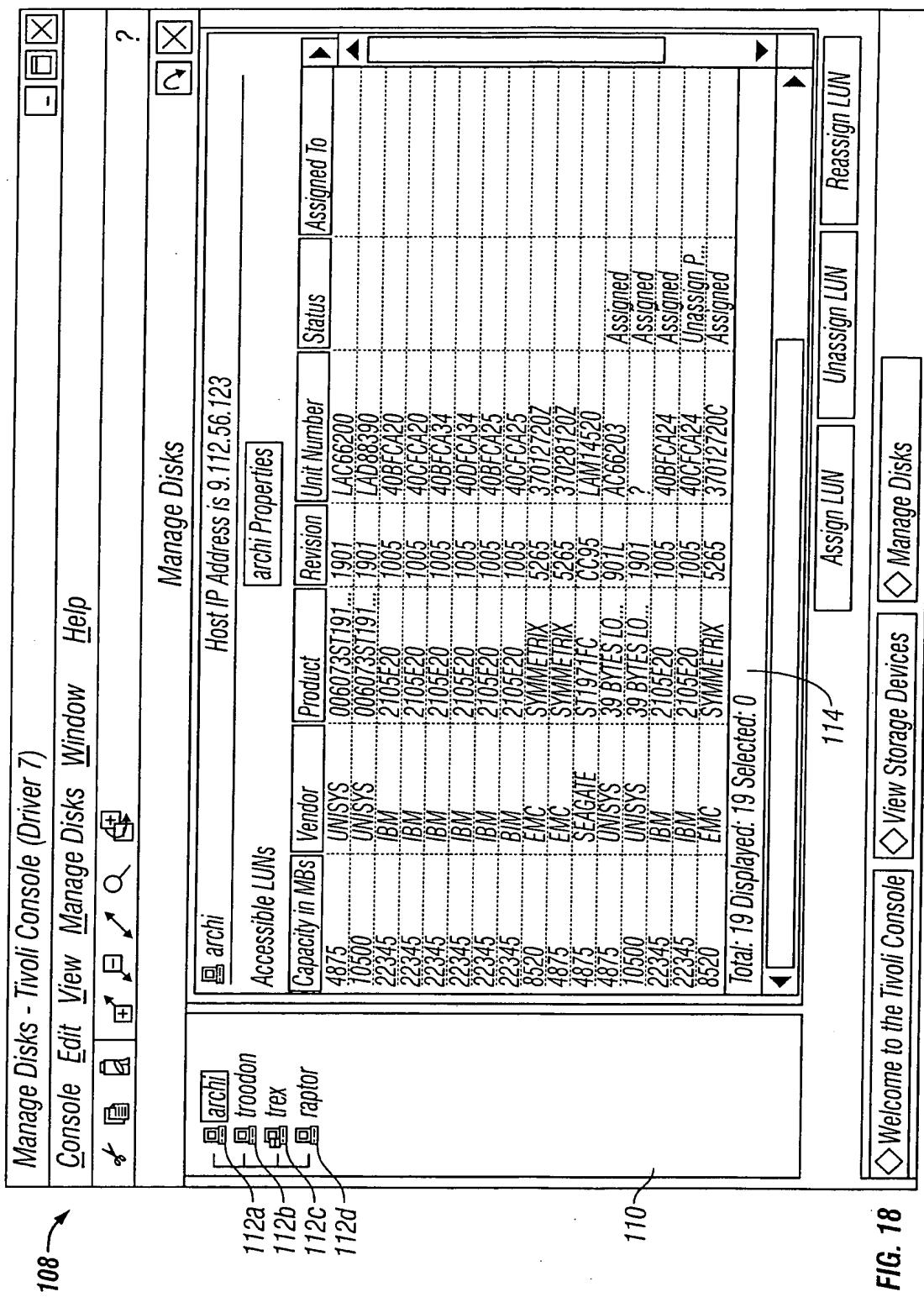


FIG. 18

24/46

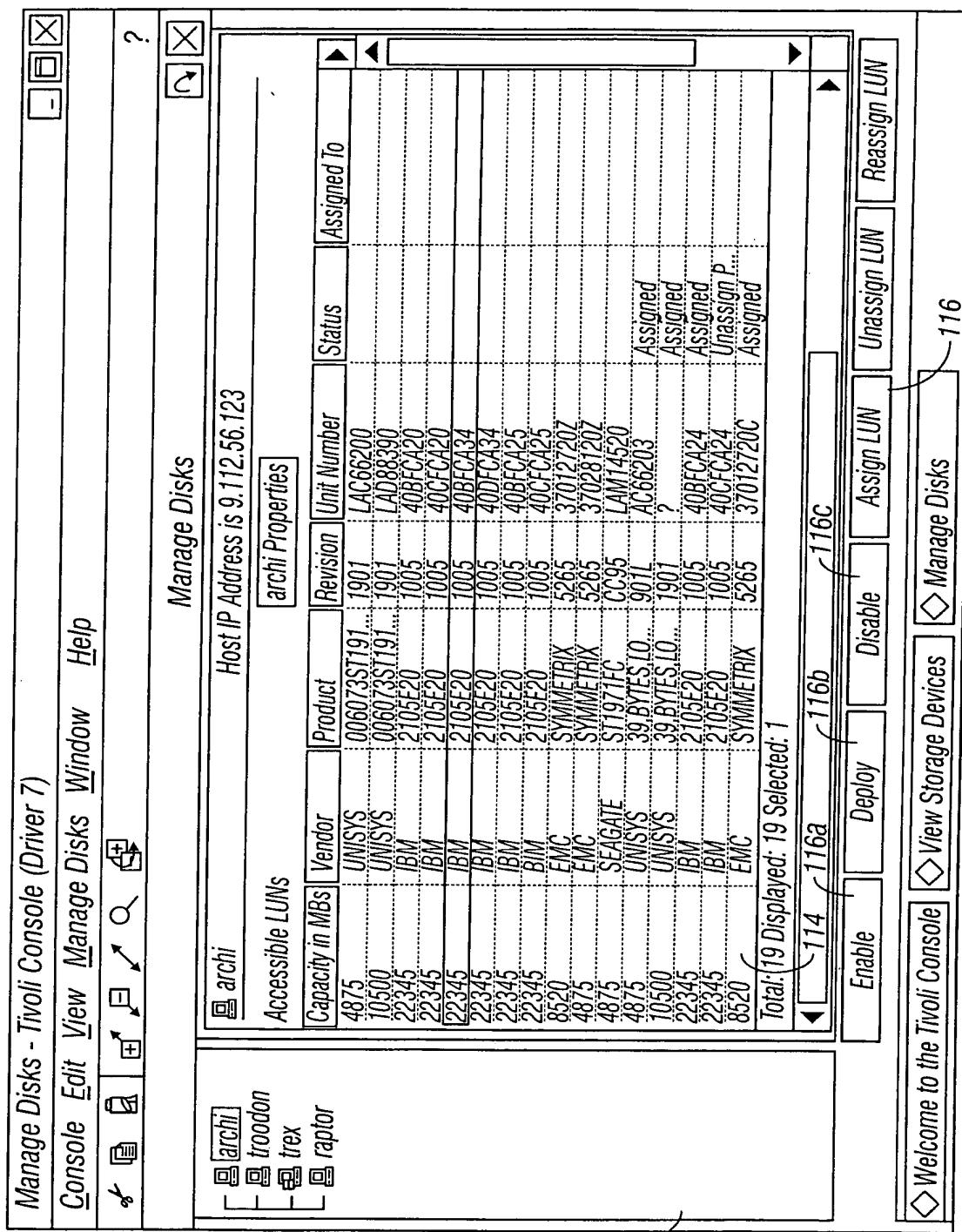


FIG. 19

25/46

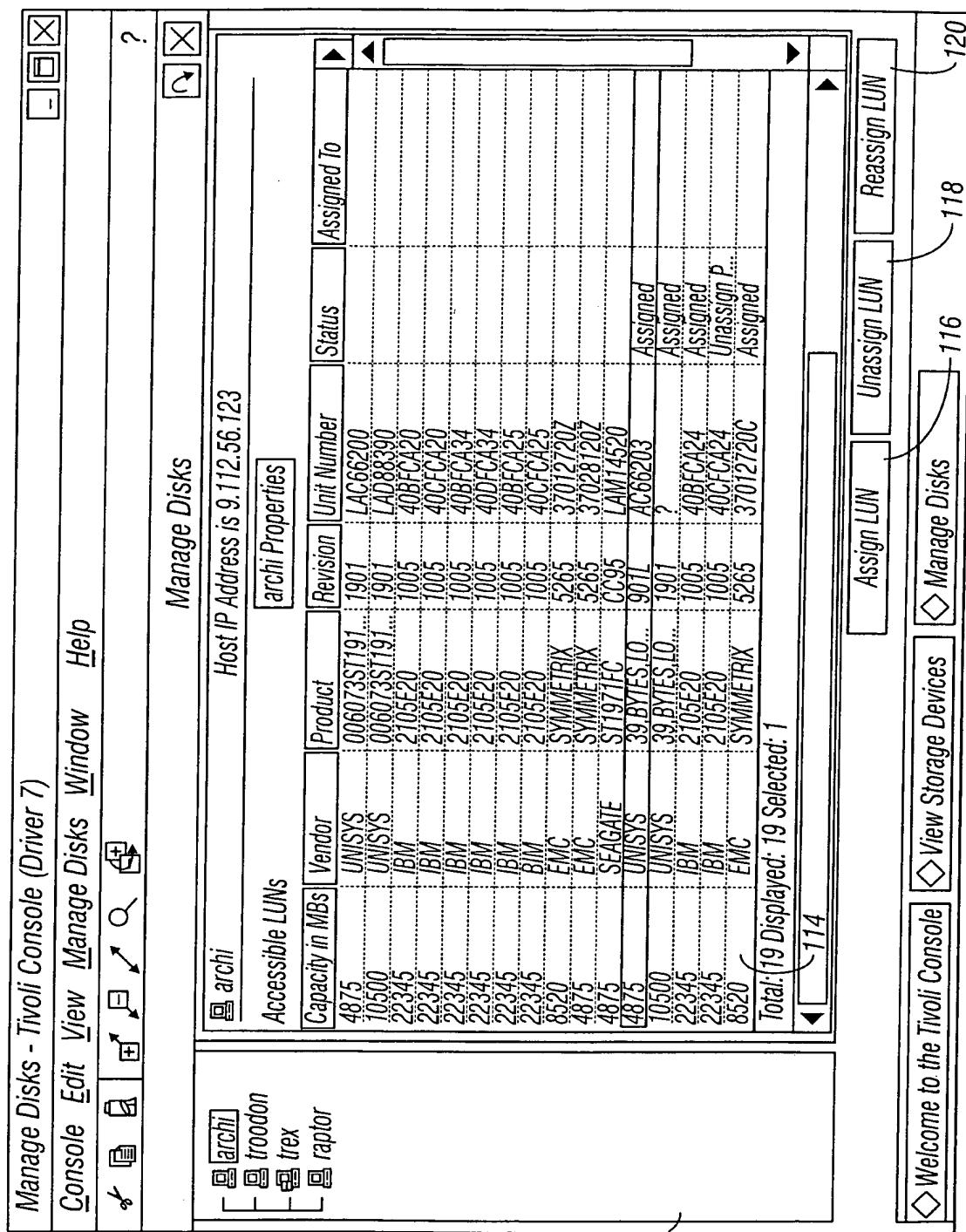


FIG. 20

26/46

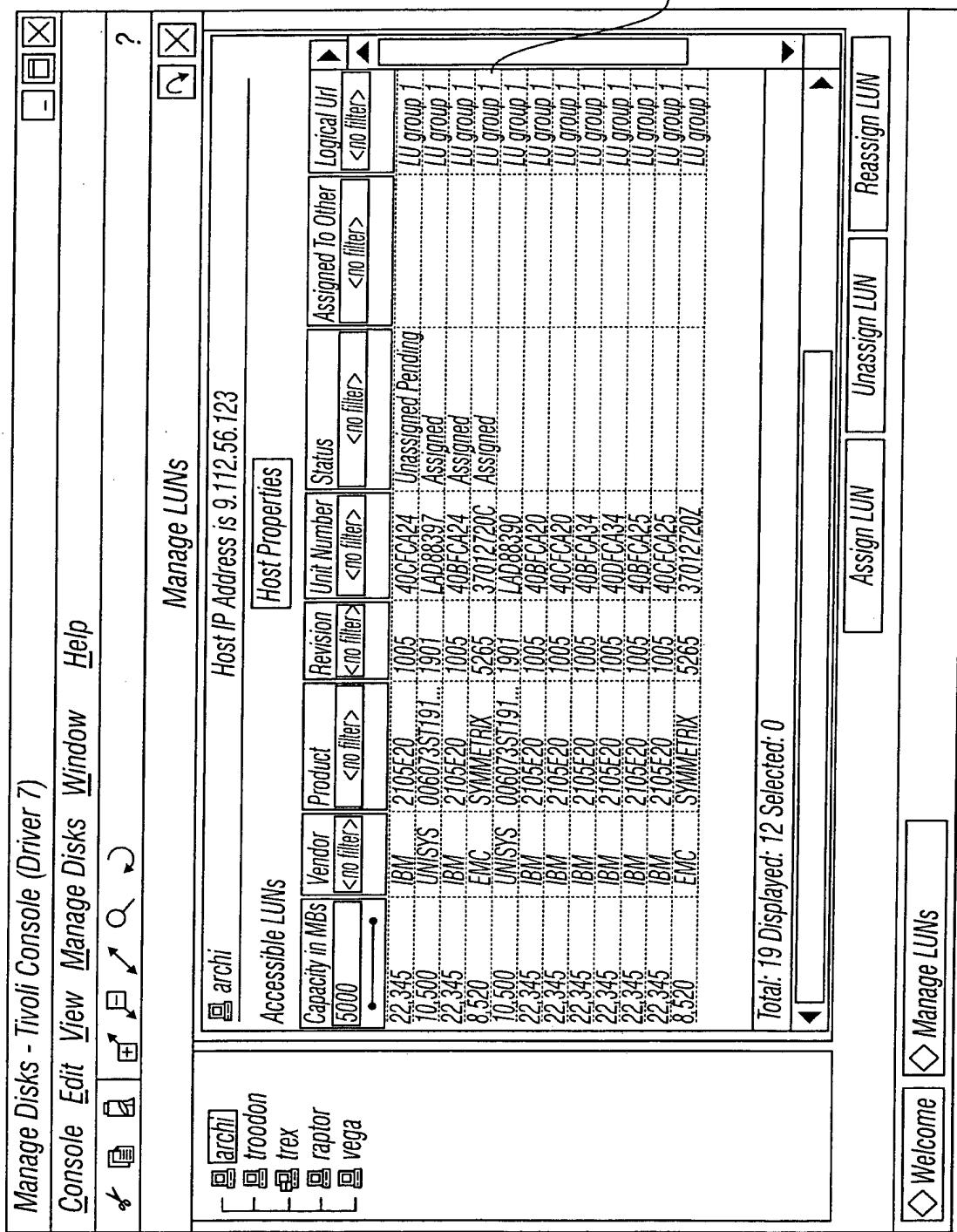


FIG. 21

27/46

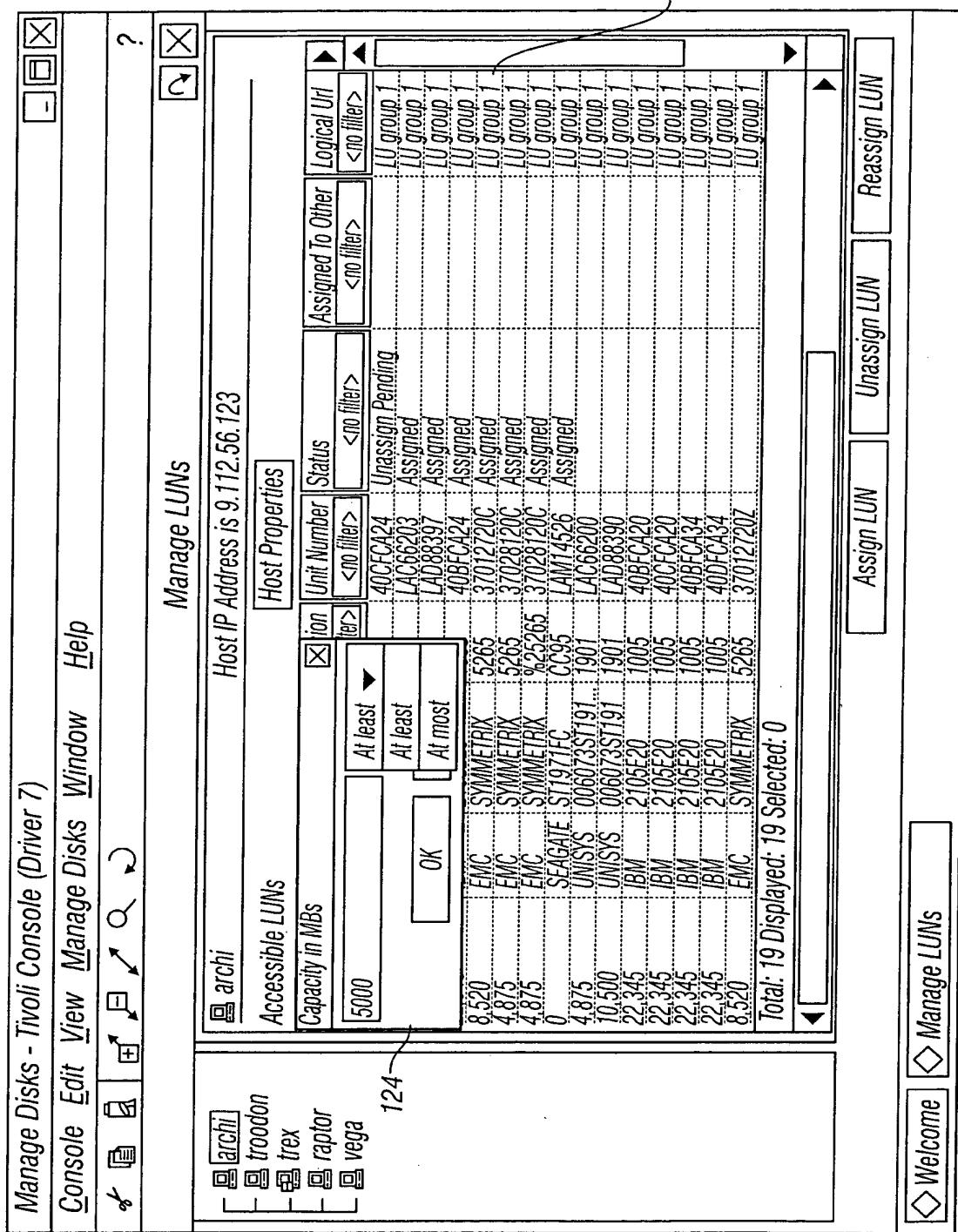


FIG. 22

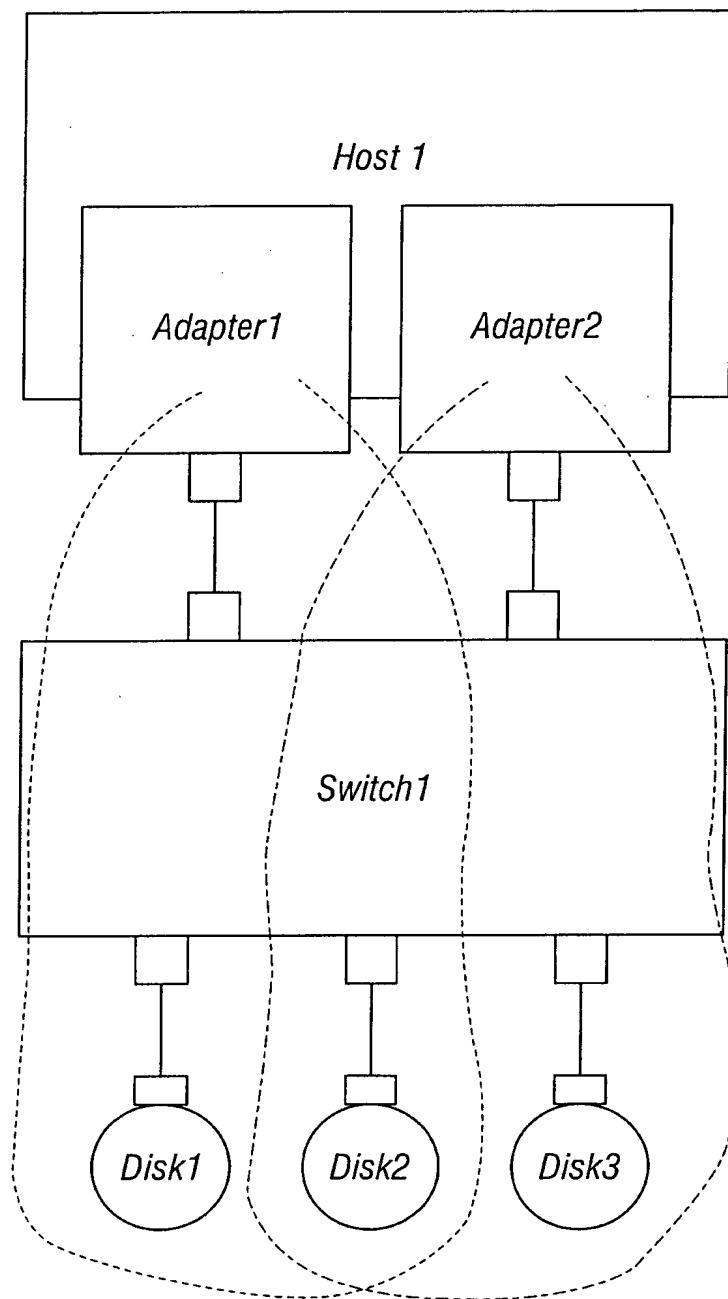


FIG. 23

29/46

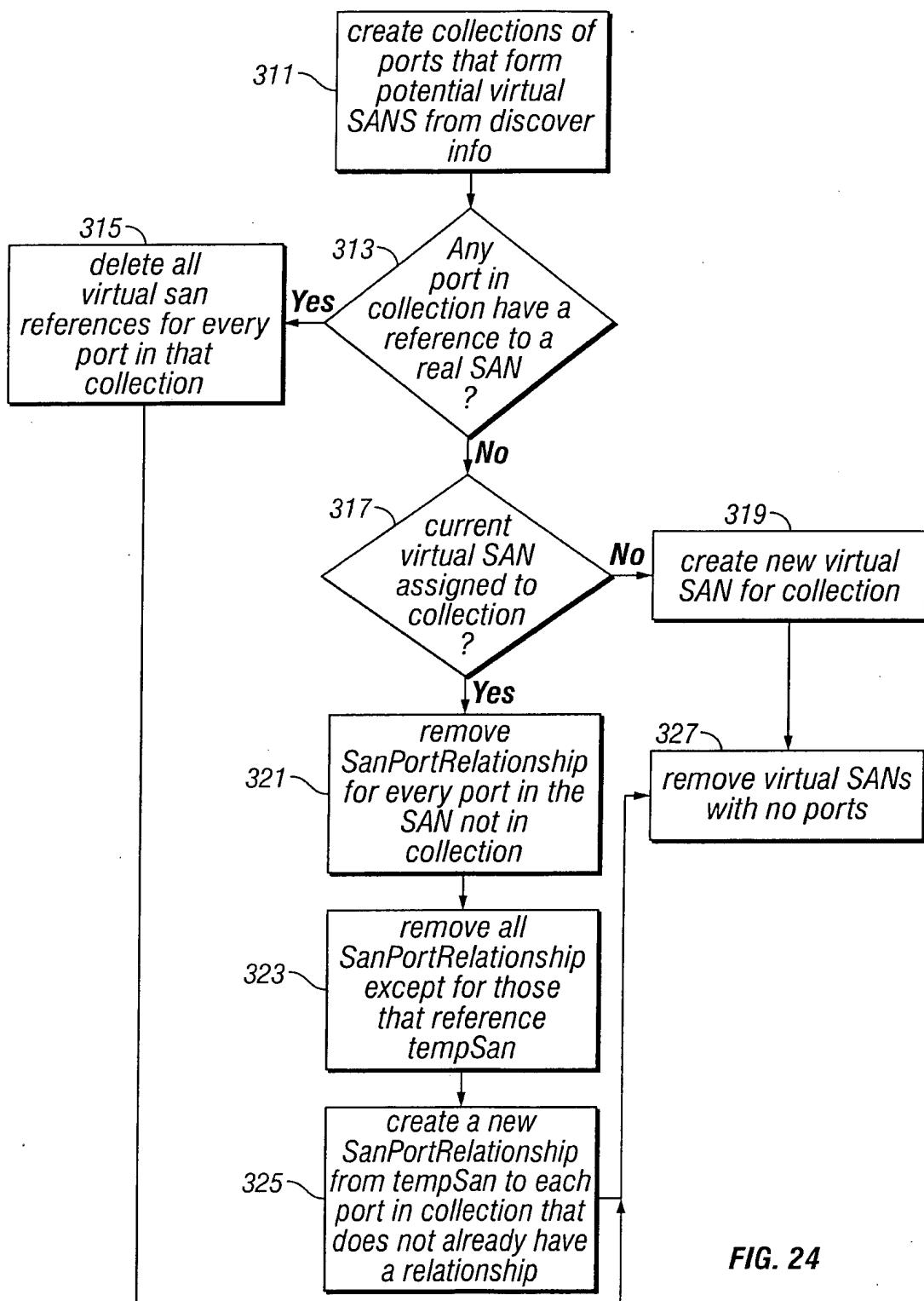


FIG. 24

30/46

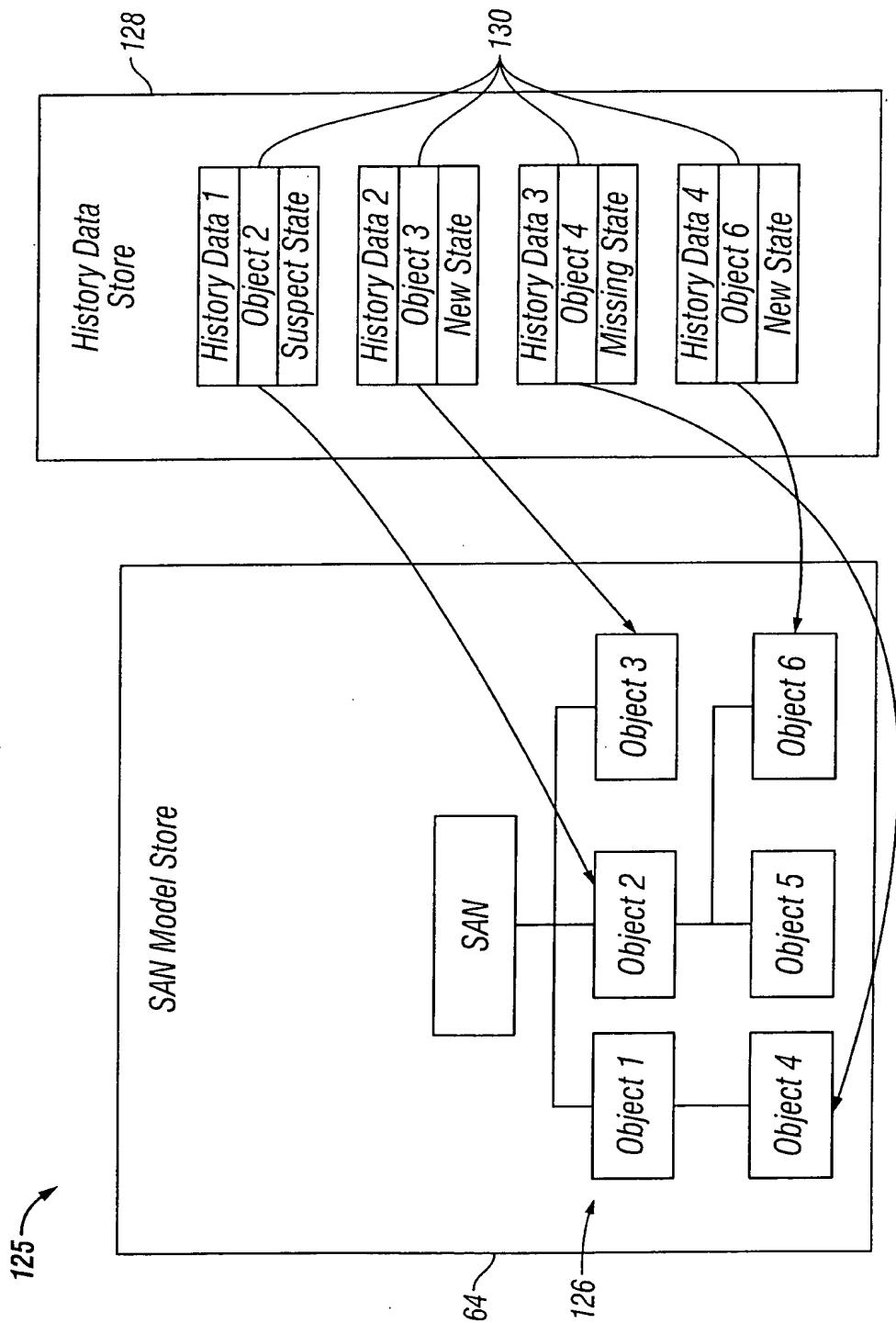


FIG. 25

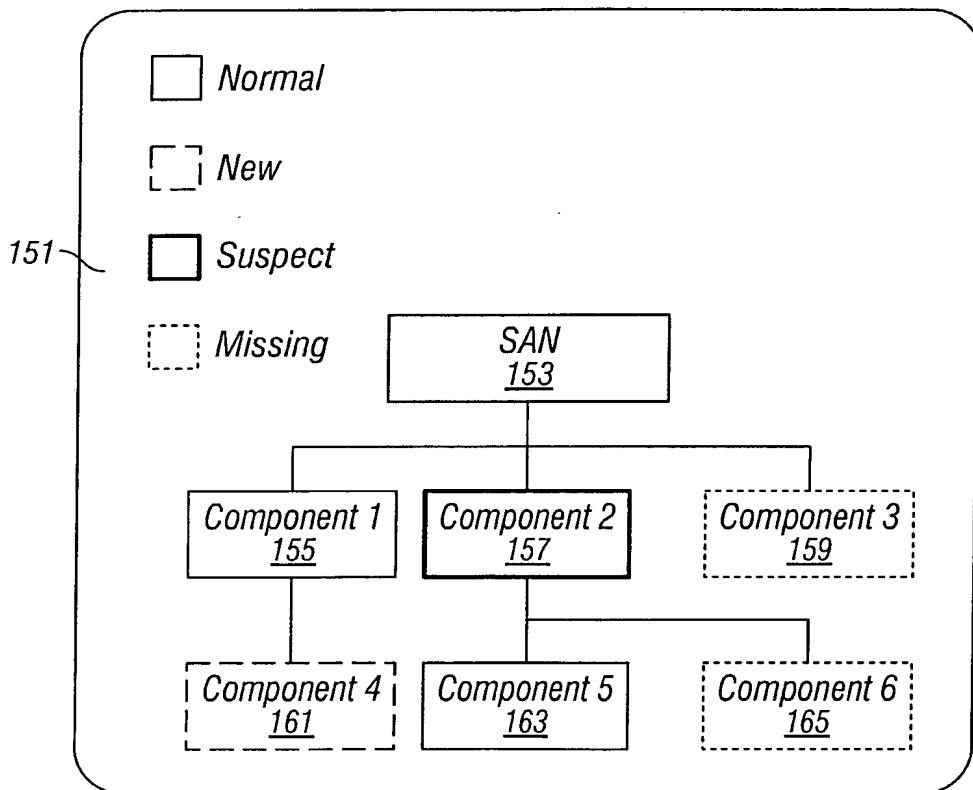


FIG. 26

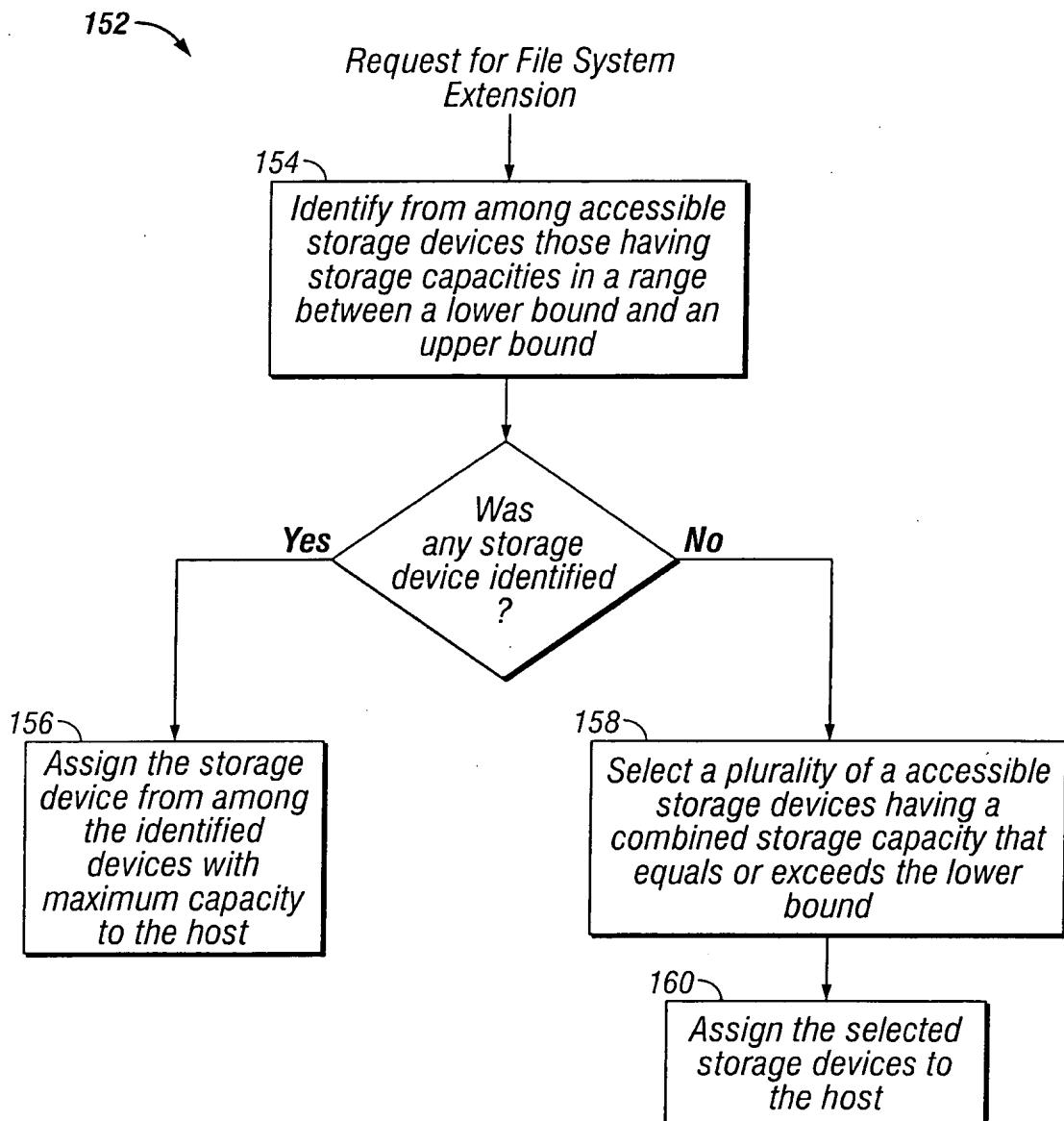


FIG. 27

33/46

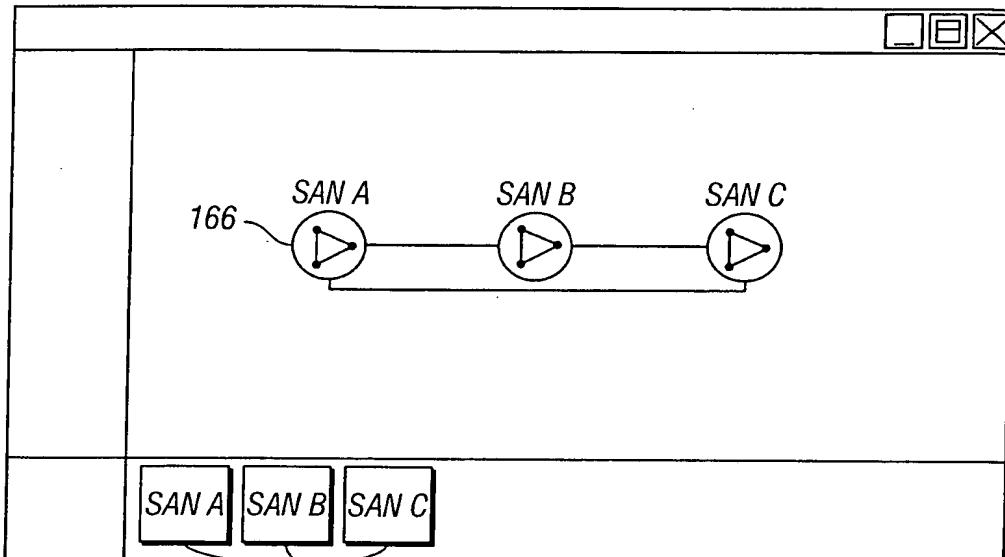


FIG. 28

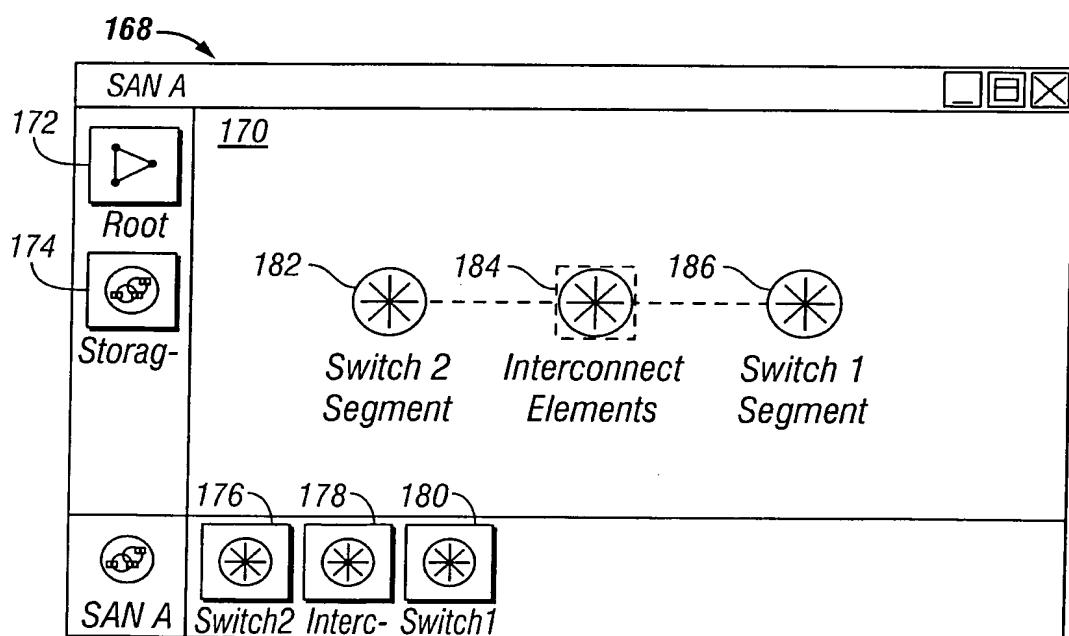


FIG. 29

34/46

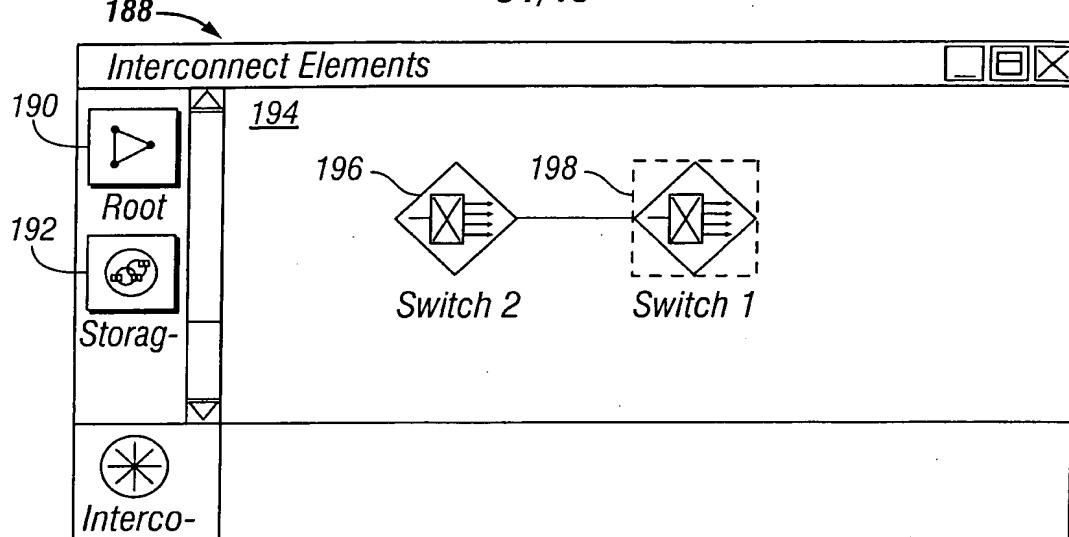


FIG. 30

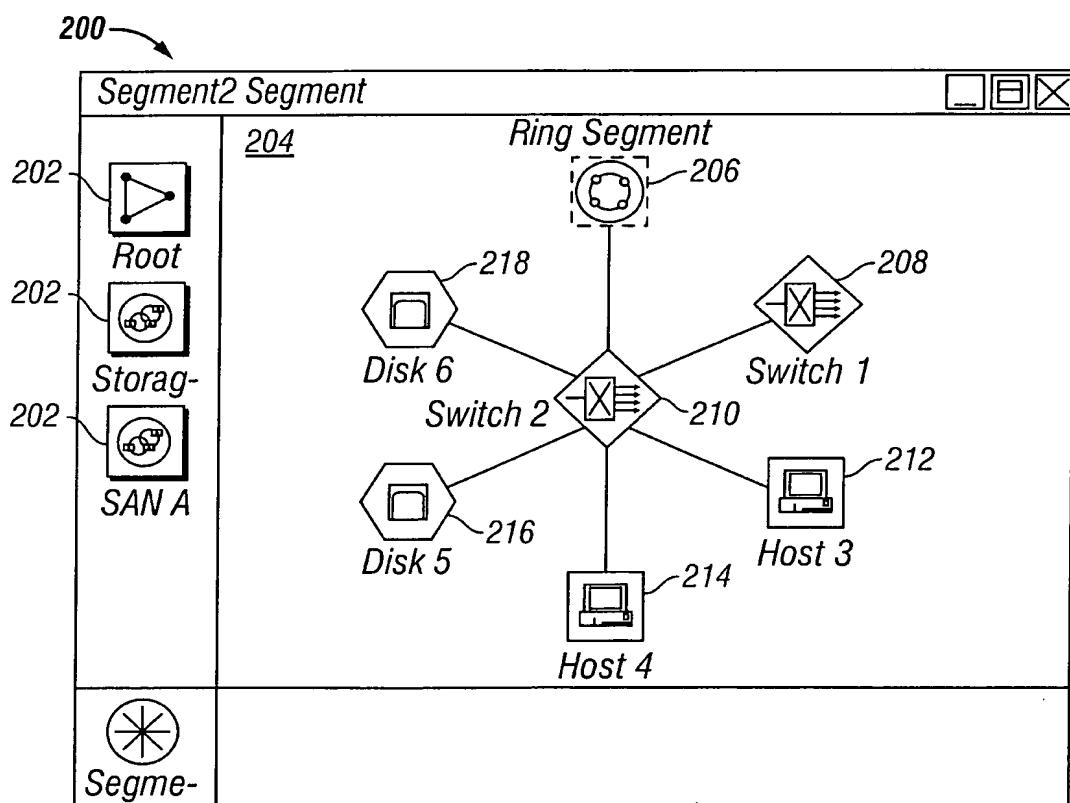


FIG. 31

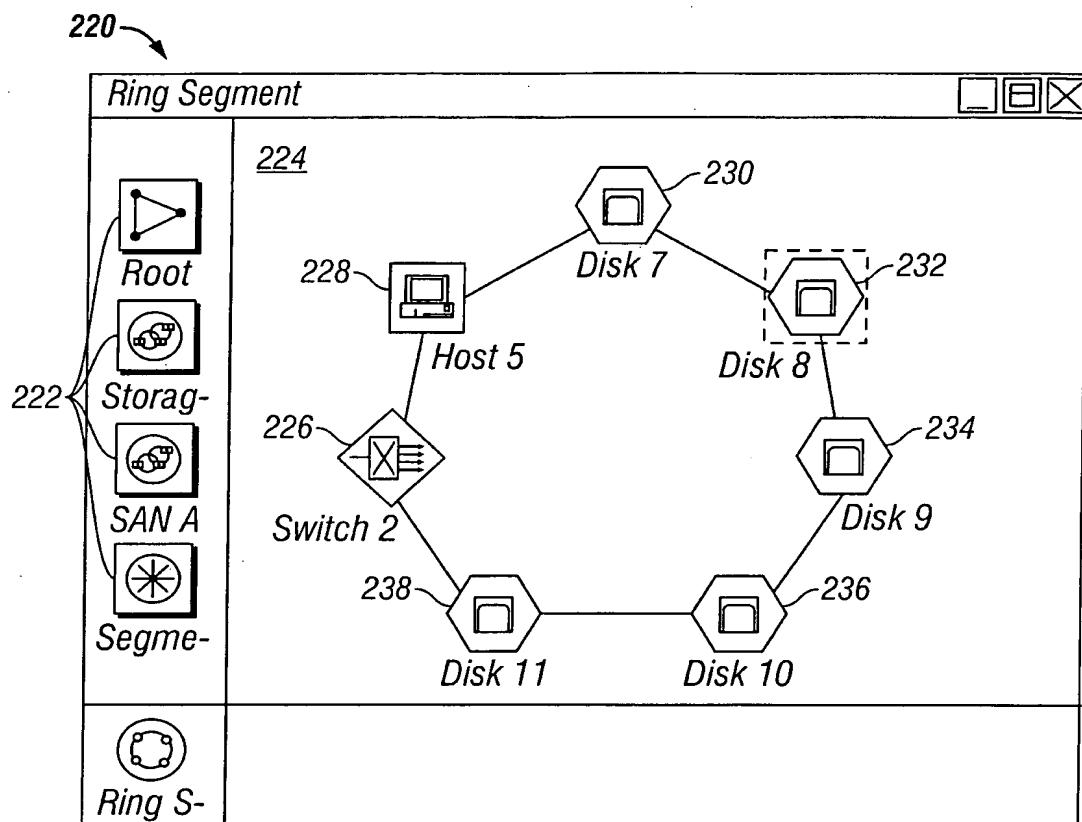


FIG. 32

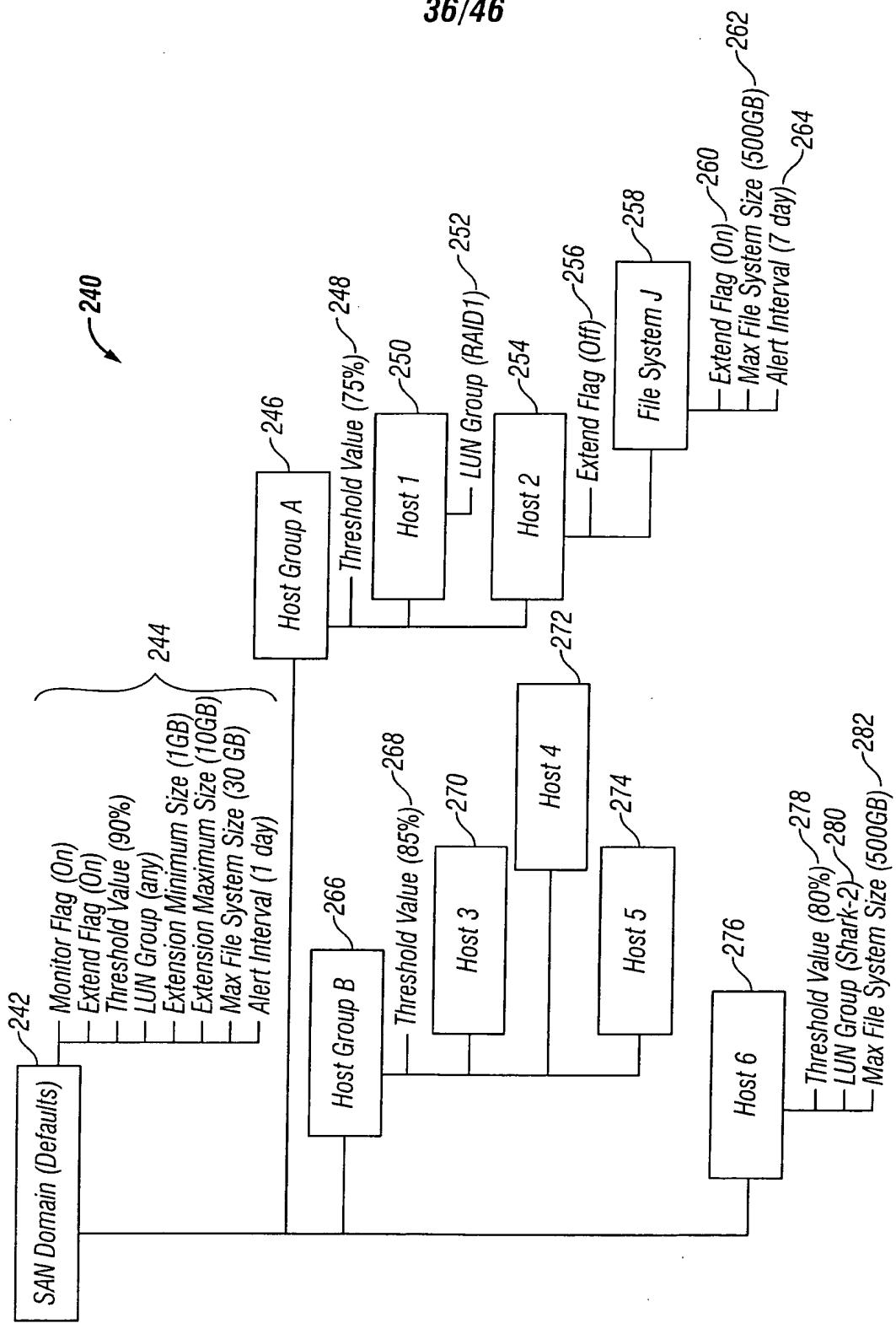


FIG. 33

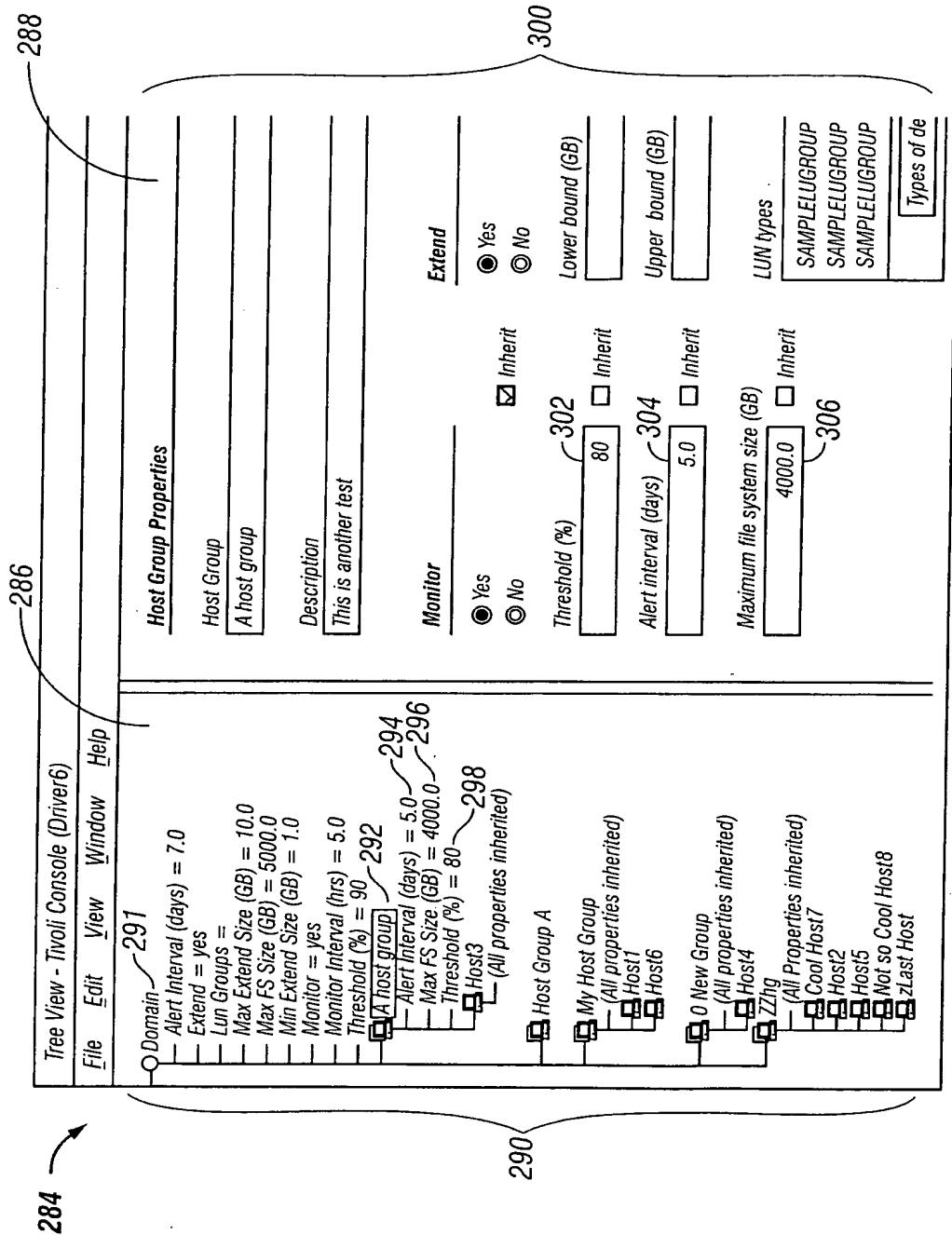
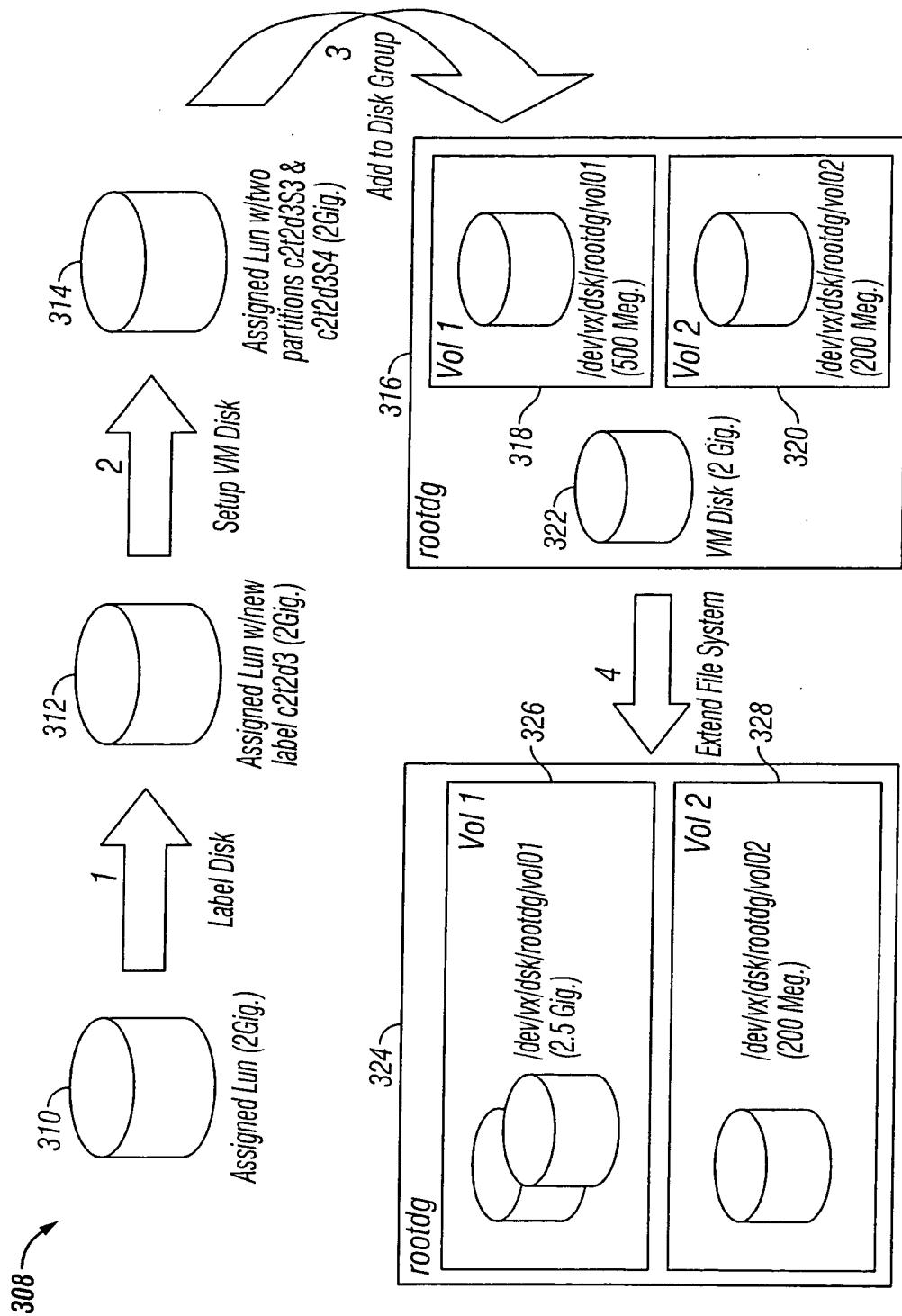


FIG. 34



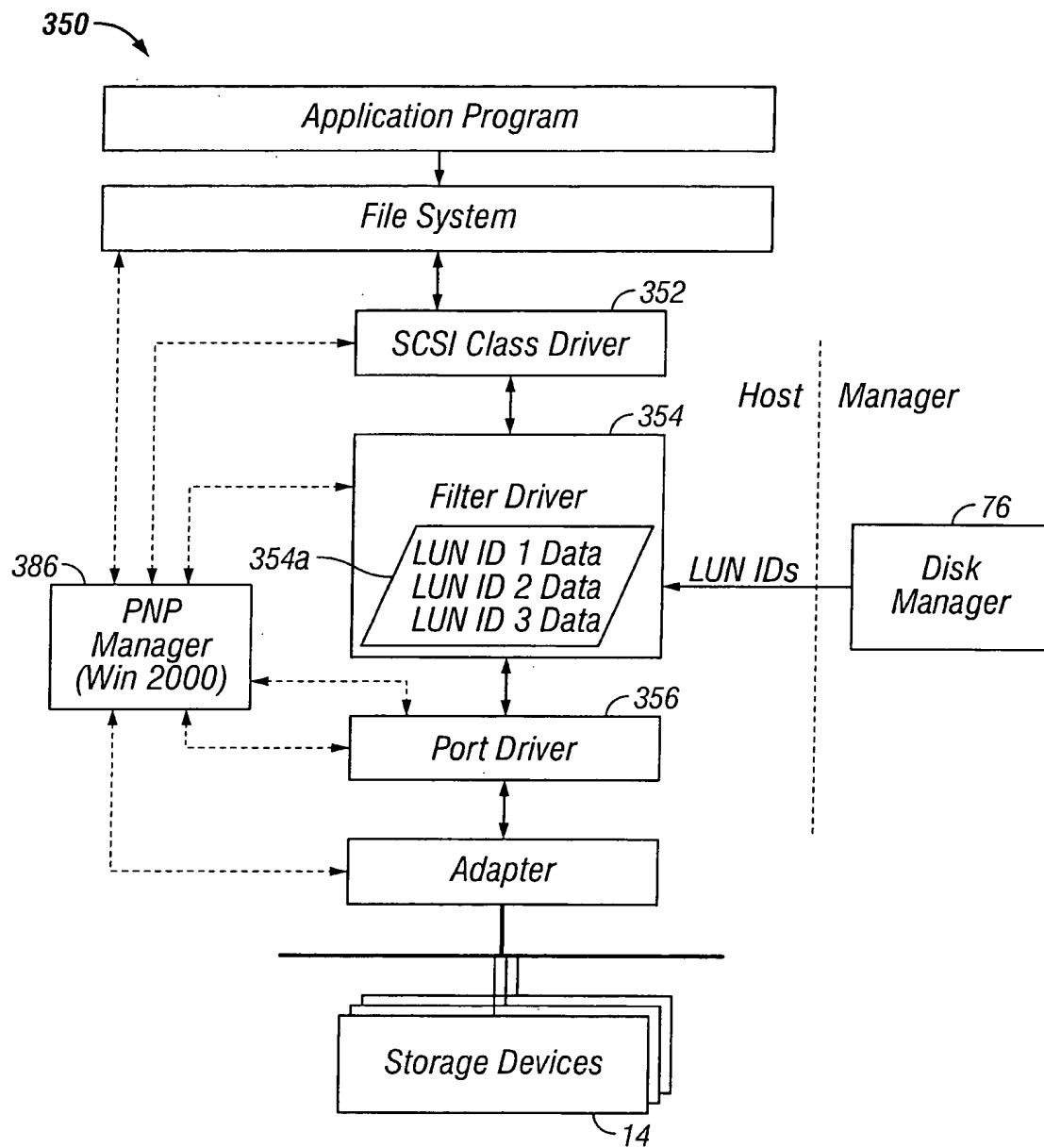


FIG. 36

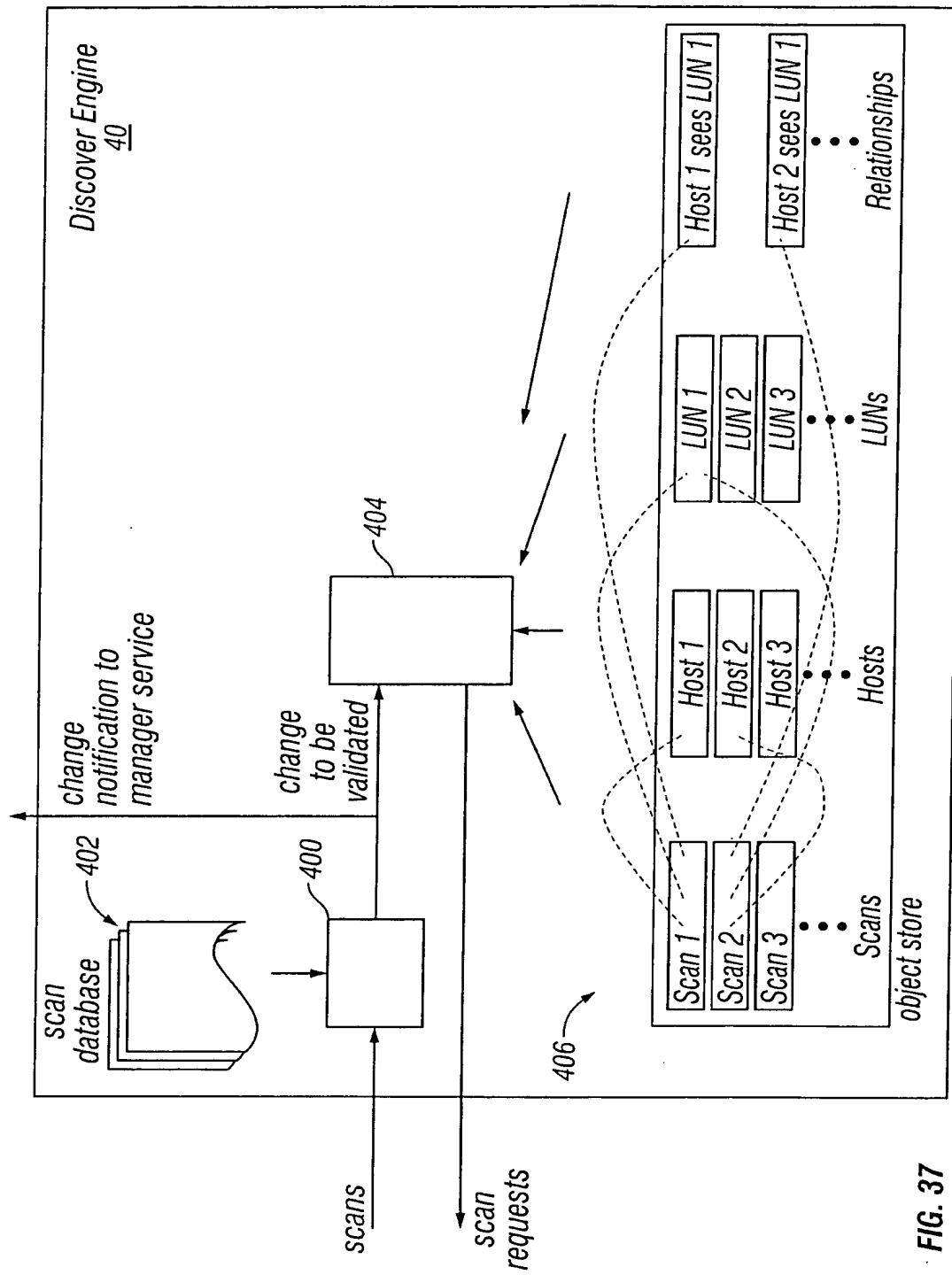


FIG. 37

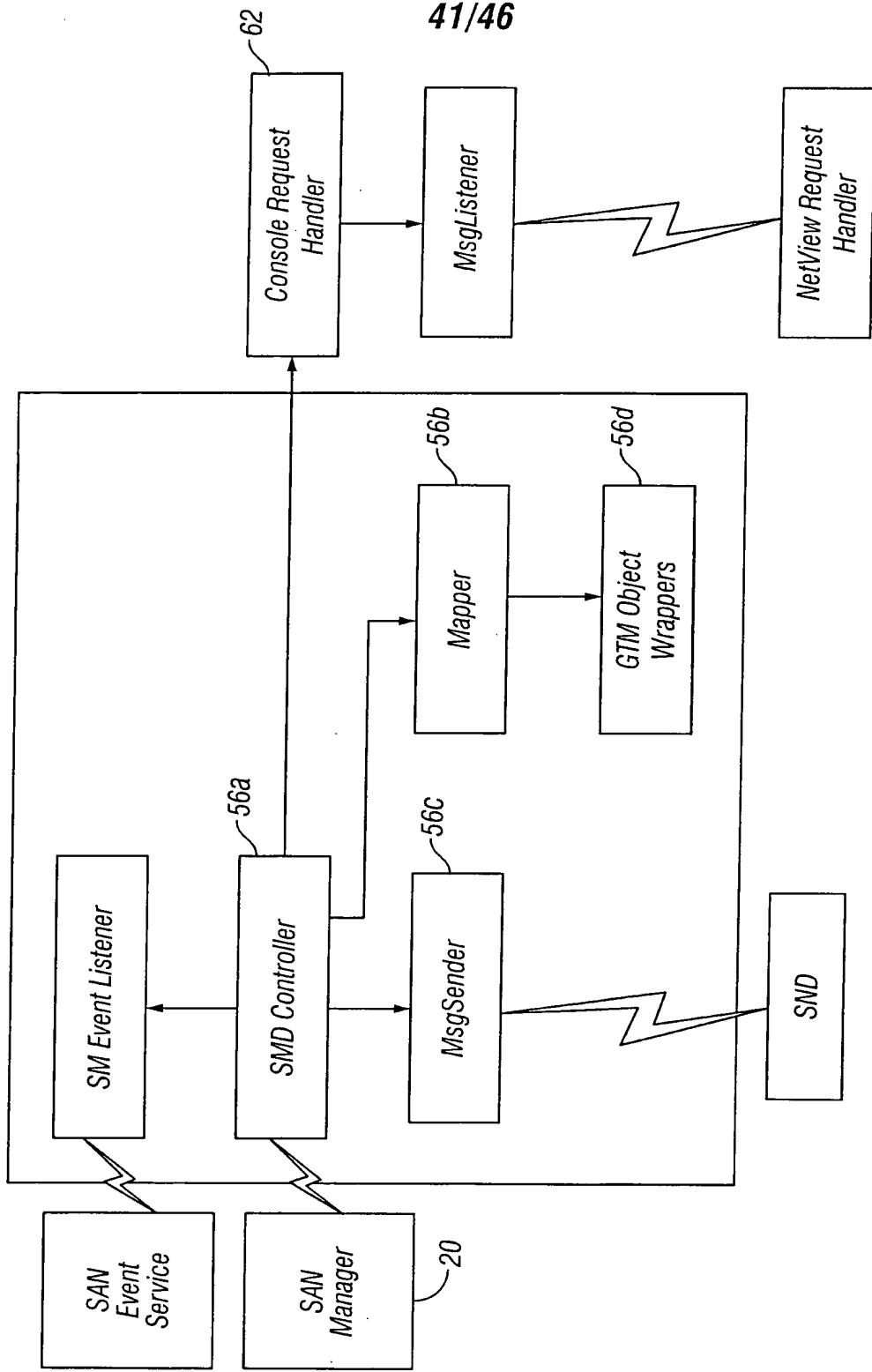


FIG. 38

42/46

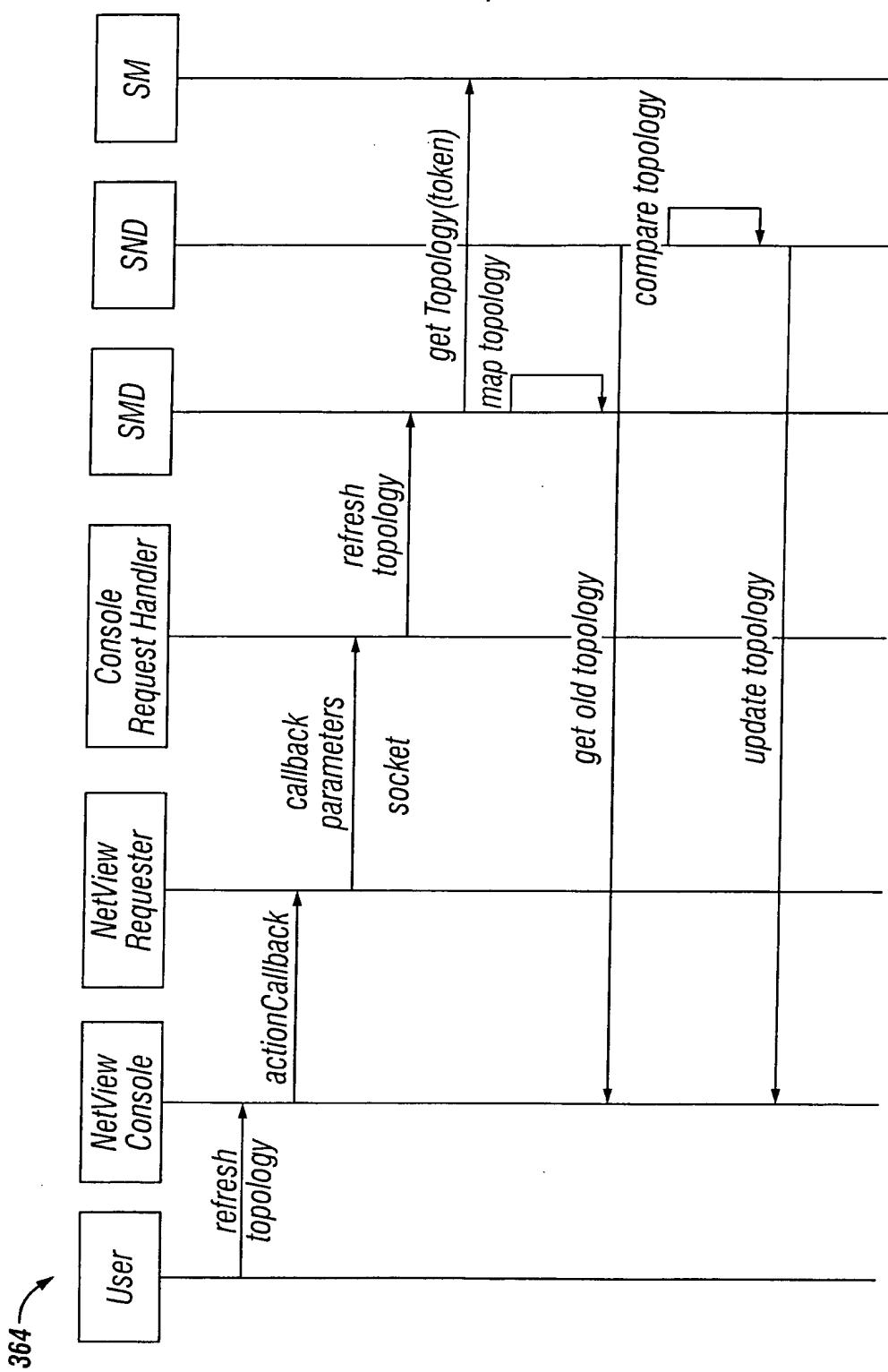


FIG. 39

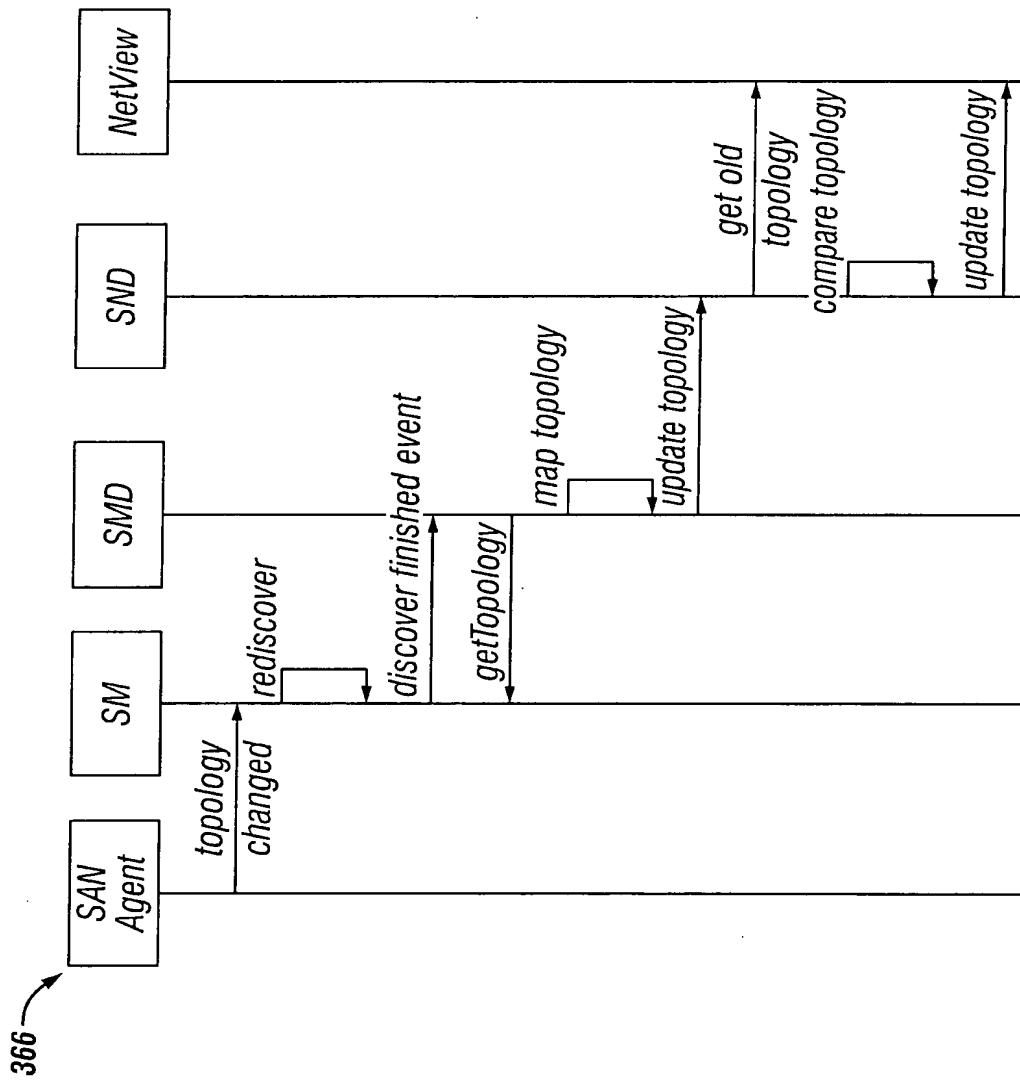
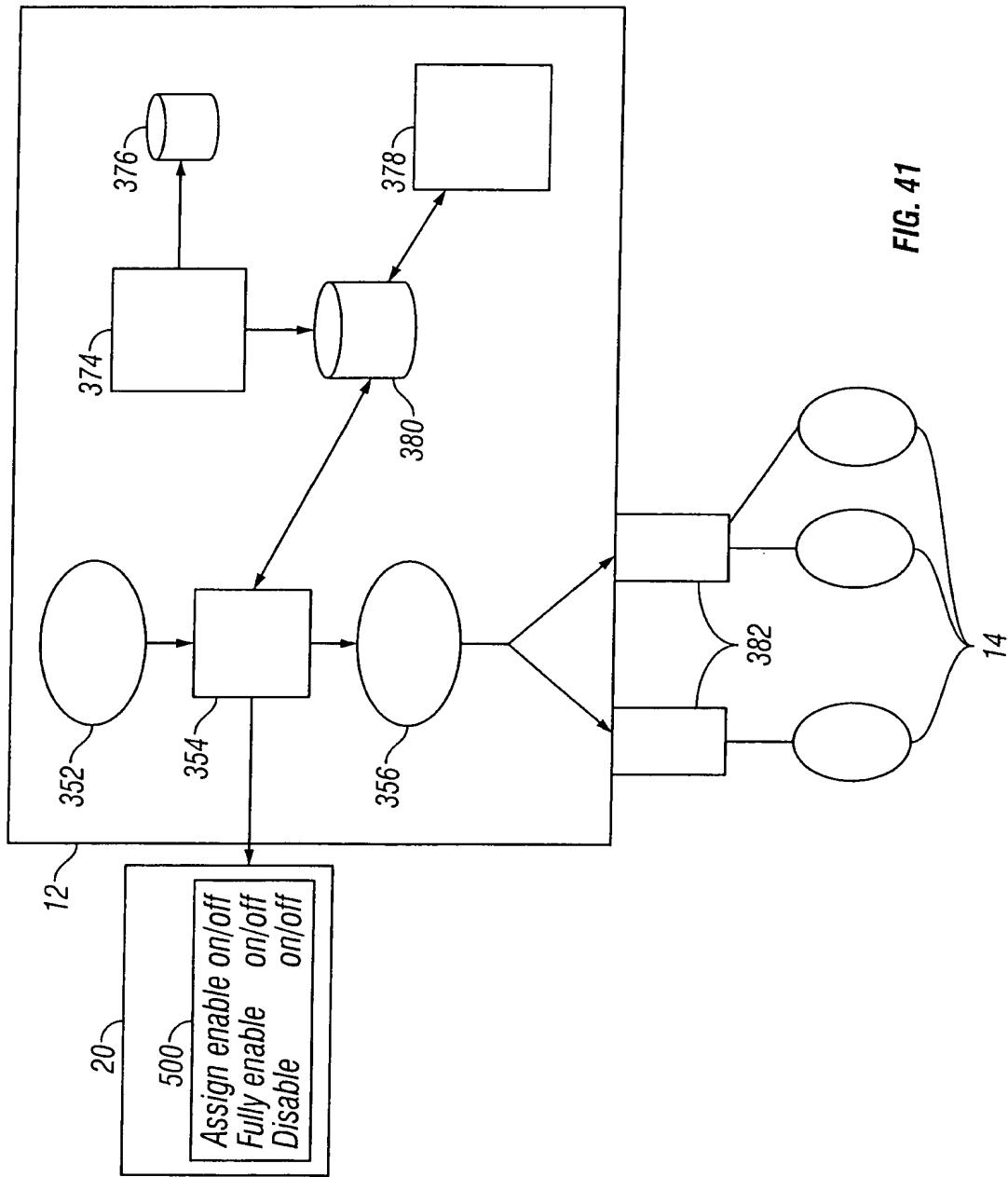
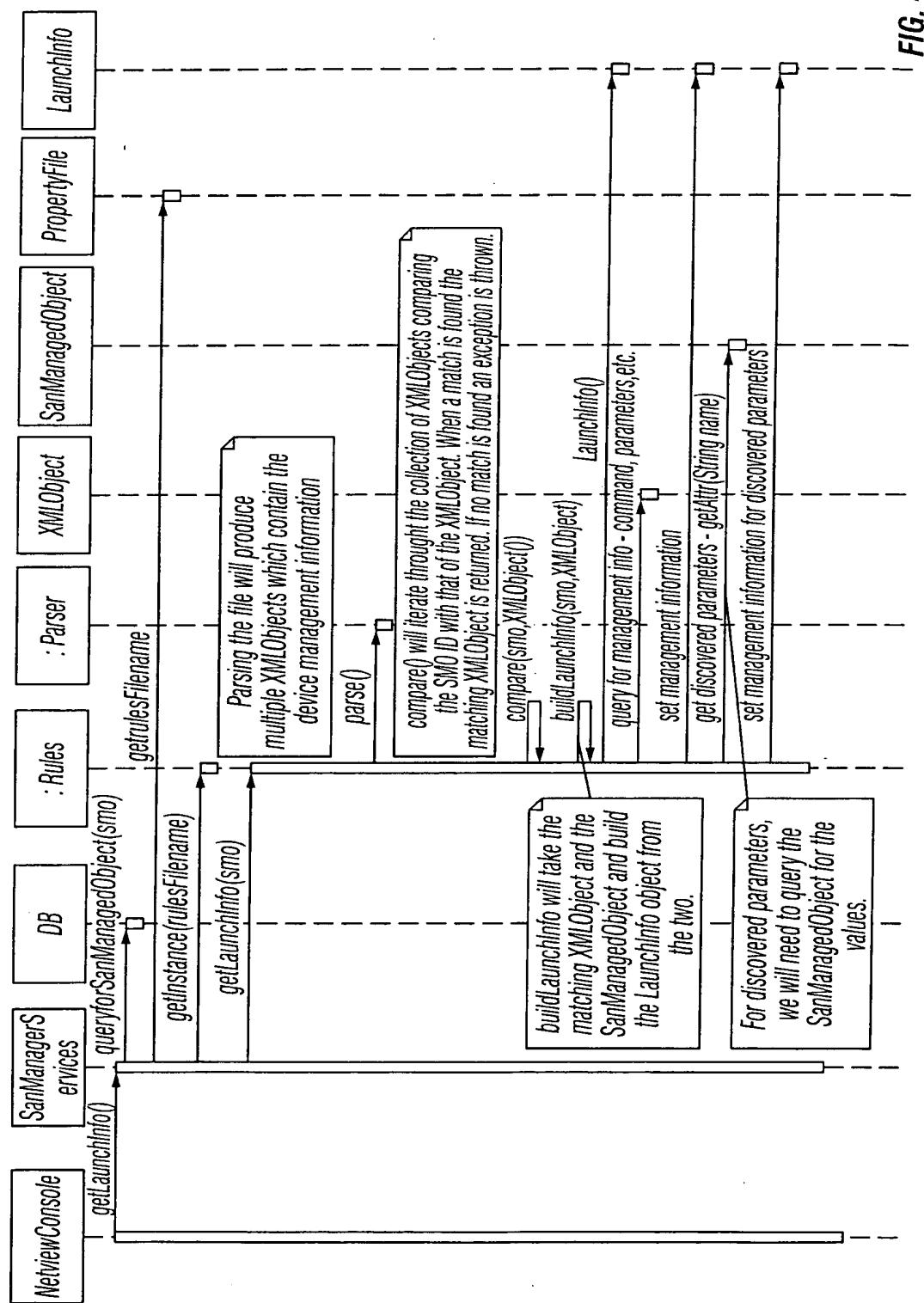


FIG. 40





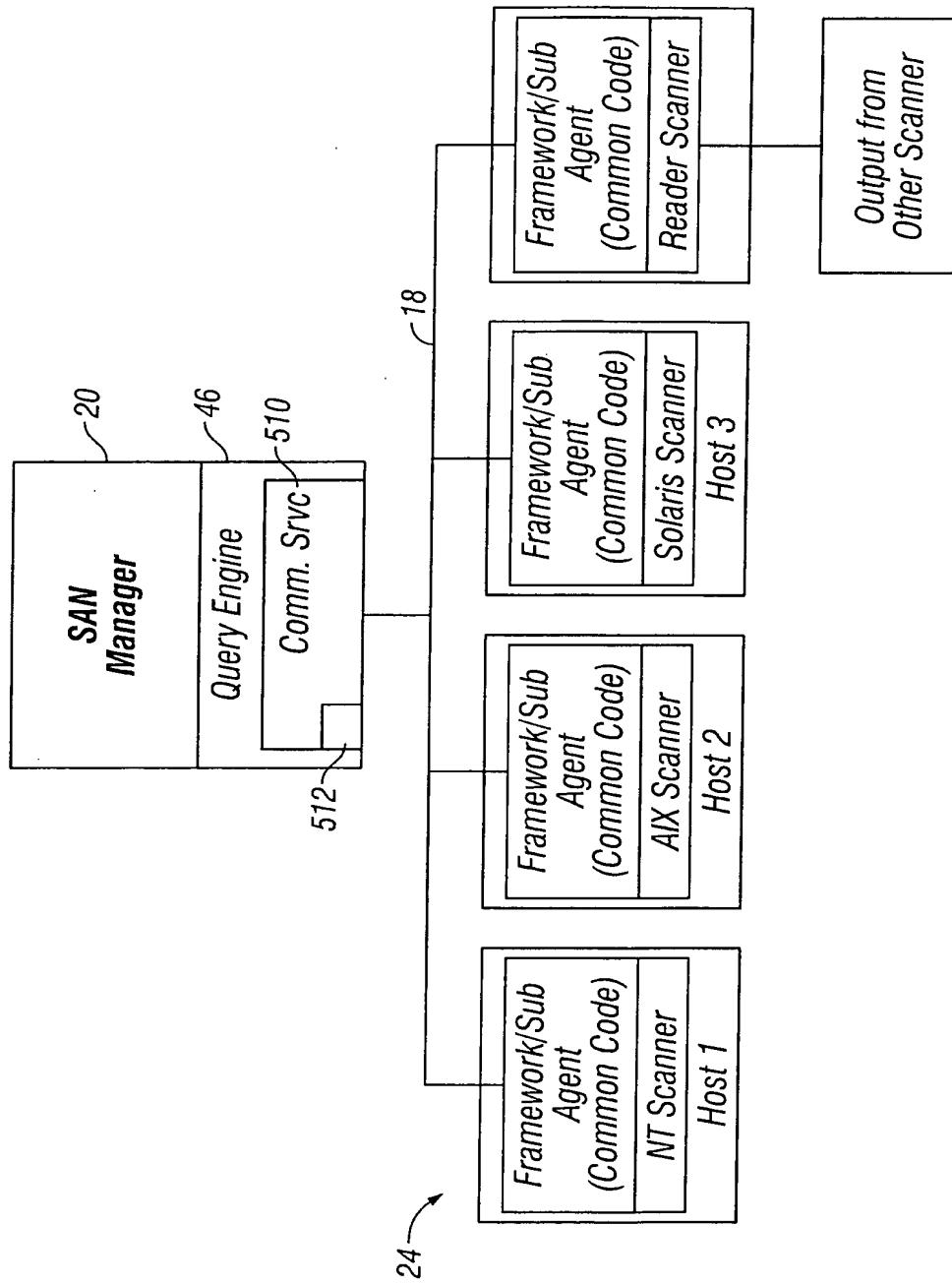


FIG. 43